

# DELAWARE STATE MEDICAL JOURNAL

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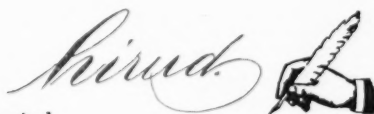
## CONTENTS

DIRECTORY	261	STREAM MORBIDITY REPORT, A. Joel Kaplorsky, Ph.D., Dover, Del.	273
MORTALITY REGISTRATION PROBLEMS, Floyd I. Hudson, M.D., M.P.H., Dover, Del.	263	FLUORIDATION OF PUBLIC WATER SUPPLIES, Margaret B. Jefferys and Donald K. Harmon, Dover, Del.	274
MEDICAL ASPECTS OF CIVILIAN DEFENSE, Edward F. Glica, M.D., Wilmington, Del.	264	THE PROGRAM OF THE DIVISION OF CRIPPLED CHILDREN'S SERVICES, Jack Sablof, M.D., Dover, Del.	276
NURSING PARTICIPATION IN DELAWARE'S CIVIL DEFENSE PROGRAM, Mary M. Klaes, R.N., B.S., Dover, Del.	265	ONE PHASE OF CORRELATION BETWEEN PEDIATRICS AND THE SPEECH AND HEARING SERVICES, Marian L. Gilmore, M.A., Dover, Del.	279
HOSPITAL SURVEY AND CONSTRUCTION PROGRAM IN DELAWARE, C. P. Knight, M.D., Dover, Del.	266	KEEPING OCCUPATIONAL THERAPY FUNCTIONAL, Herbert C. Verry, B.S., O.T.R., Dover, Del.	281
THE DIAGNOSIS OF CONGENITAL SYPHILIS, Winder L. Porter, M.D., M.P.H., Dover, Del.	268	NUTRITION IN QUANTITY FOOD SERVICE, Mary F. Davenport, M.S., Dover, Del.	282
THE CANCER PROGRAM OF THE STATE BOARD OF HEALTH, George F. Campana, M.D., M.P.H., and William H. Randy, M.D., Dover, Del.	270	MEDICAL SOCIETY OF DELAWARE	283
WE LIVE LONGER, Cecil A. Marshall, B.S., Dover, Del.	272	MISCELLANEOUS	288
		EDITORIALS	289
		OBITUARY	291
		BOOK REVIEWS	291

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WILMINGTON, OCTOBER 8-10, 1951

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Very likely you would if you had practiced

in 1876, when lantern parades and street fights were popular forms of entertainment—and Eli Lilly and Company had just begun.

Then the prescription for a *hirudo*, or leech, was the preferred

treatment for a "black eye." In contrast, studies today are bent

upon conquering the more serious vascular

disorders. Research of this kind has made

real progress in the Lilly Laboratories.



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almost  
a quarter  
million  
babies  
annually  
allergic to  
cow's milk?

"Approximately one of every fifteen infants is allergic to cow's milk to some degree....," according to Clein in a recently published article.\* These allergic reactions produce a multiplicity of strange, baffling, serious and apparently unrelated clinical syndromes.

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Mull-Soy supplies (in standard 1:1 dilution) essential protein, fat, carbohydrate and minerals comparable to those of cow's and goat's milk. The fat in Mull-Soy is soy oil, a good source of unsaturated fatty acids.

Mull-Soy is a liquid, homogenized (vacuum-packed) food—easy to take, easy to prescribe.

Available in drugstores in 15½ fl. oz. tins.

\*Clein, N. W.: Cow's Milk Allergy in Infants, *Annals of Allergy*, March-April, 1951.

# Mull-Soy



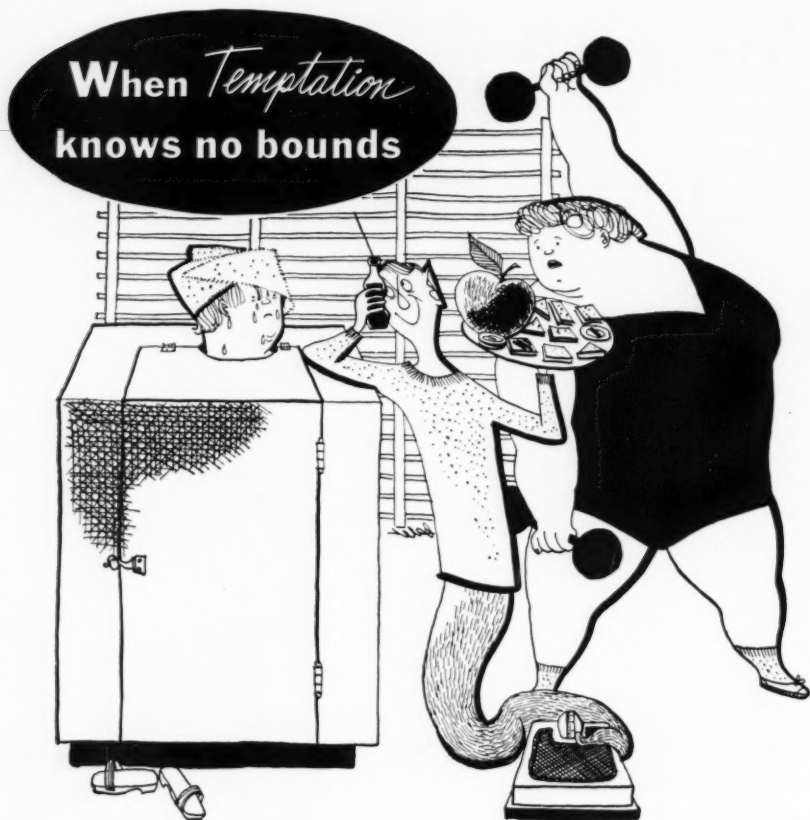
first in

hypoallergenic diets for infants, children and adults

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After all the  
Mildness Tests,  
**Camel** is  
America's  
most popular  
cigarette by  
billions!





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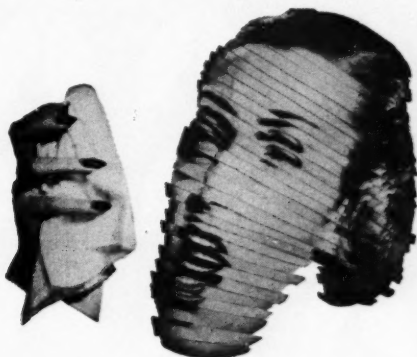
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ELIXIR  
2.5 mg. per  
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20 mg.  
per cc.

*Quick Comfort . . .  
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Each year, more and more hay fever patients are enjoying safe relief of symptoms through Neo-Antergan.®

Regardless of the season, experience has shown the remarkable efficacy of this antihistaminic agent.



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Neo-Antergan is advertised exclusively  
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Maleate in 25 mg. and 50 mg. coated  
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# NEO-ANTERGAN®

MALEATE

(Brand of Pyrilamine Maleate)  
(Formerly called Pyranisamine Maleate)

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**MERCK & CO., INC.**

*Manufacturing Chemists*

RAHWAY, NEW JERSEY





reducing



# pulmonary embolism

"The incidence of operative death from pulmonary embolism" occurred in 10% of hepatic resections during a 6-year period in a hospital with 1000 admissions. With early diagnosis, early embolization, and prompt treatment of thromboembolism, mortality was reduced to 1.5 percent in a control series to 0.4 per cent. The results in the control of the thromboembolic phenomenon are made possible by the pioneering efforts of investigators in early treatment of venous thrombosis.

Upjohn has developed new and advanced preparations for the prophylactic treatment of Depo-Heparin (Heparin Sodium) in doses approximately 200 to 400 mg. This gives a plasma concentration of 2 to 4 times normal for about 24 hours.

Depo-Heparin is a prolonged thromboembolic control.

R<sub>x</sub>

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Each cc. contains Heparin Sodium 200 mg. (approximately 200 mg.)  
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 250 mg. Heparin Sodium 200 mg. (approximately 200 mg.)  
 500 mg. Heparin Sodium 400 mg. (approximately 400 mg.)  
 1000 mg. Heparin Sodium 800 mg. (approximately 800 mg.)

Depo-Heparin is a prolonged thromboembolic control. It is a new and advanced preparation for the prophylactic treatment of Depo-Heparin (Heparin Sodium) in doses approximately 200 to 400 mg.

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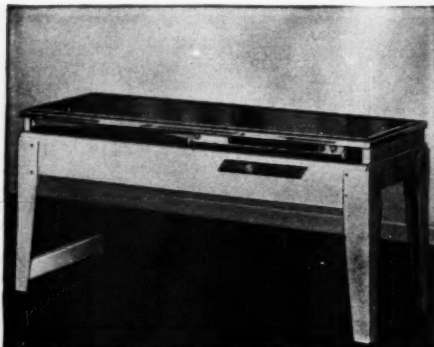
Depo-Heparin is a prolonged thromboembolic control. It is a new and advanced preparation for the prophylactic treatment of Depo-Heparin (Heparin Sodium) in doses approximately 200 to 400 mg.

**Upjohn**

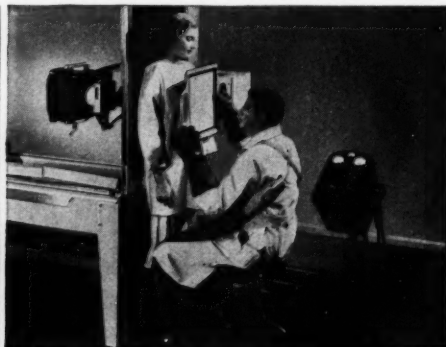
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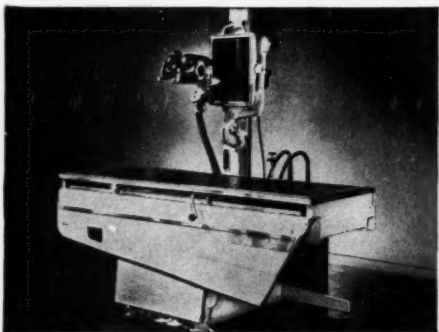
## YOU WON'T OUTGROW THESE X-RAY UNITS!



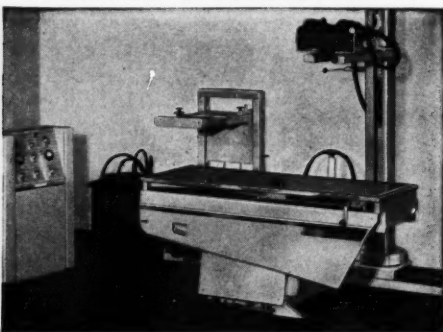
**Horizontal Bucky Table**—This is the simplest, the basic Maxicon unit. Practical for use in straight radiography, it can later be upgraded to provide one of many units to expand your facilities.



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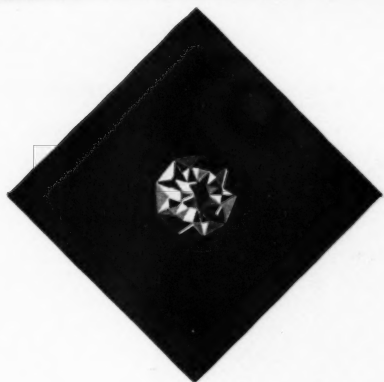
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Small dosage makes ESTINYL inimitable among orally effective estrogens. As little as *two hundredths of a milligram daily* relieves menopausal symptoms and produces a sense of well-being obtainable only with larger doses of other estrogens.

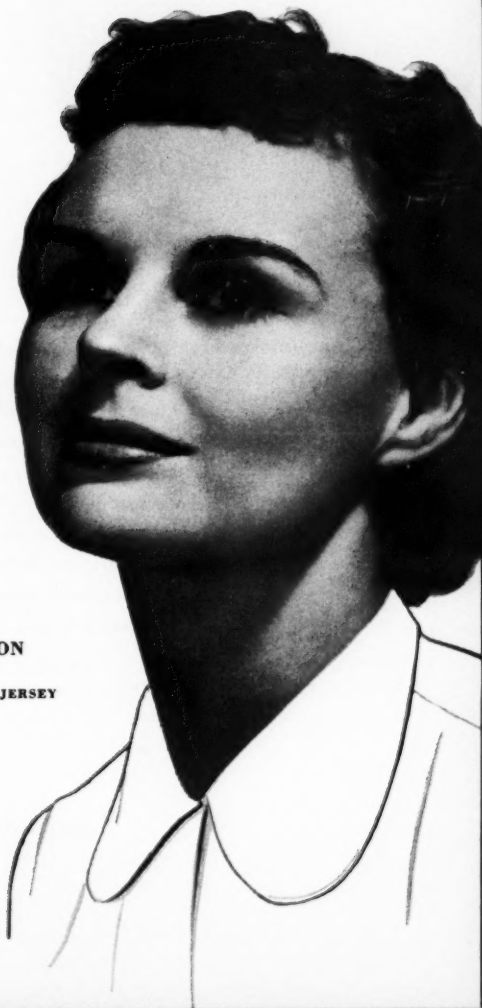
# ESTINYL®

(ethinyl estradiol-Schering)

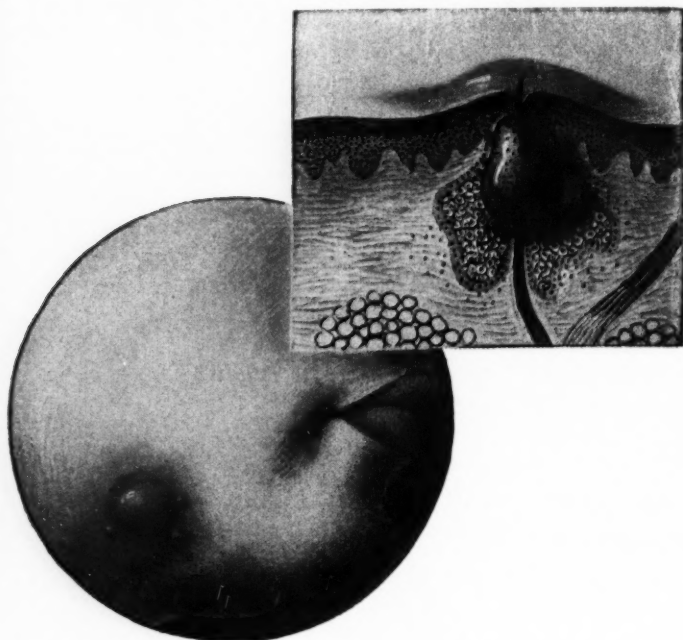
Available for treatment of menopause and other estrogen deficiency states, in tablets of 0.02, 0.05 and 0.5 mg.

*Schering* CORPORATION

BLOOMFIELD • NEW JERSEY



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*In Soft-tissue Infections:* "Terramycin was used in [101] soft-tissue infections and proved to be of great value... Where the terramycin was used intravenously with the proper diluent, no instance of chemical phlebitis occurred.... Where surgical intervention was used in conjunction with terramycin, the decrease in morbidity was marked and noteworthy... That terramycin has a wide and useful area of great value in the treatment of soft-tissue infections is beyond question."

Wright, L. T., et al.: *Antibiotics and Chemotherapy* 1:165 (June) 1951.

ANTIBIOTIC DIVISION





*Terramycin is also indicated in a wide range of*

# Terramycin

Available as

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ORAL DROPS

INTRAVENOUS

OPHTHALMIC

OINTMENT

OPHTHALMIC

SOLUTION



## GRAM-POSITIVE BACTERIAL INFECTIONS

*Lobar pneumonia • Mixed bacterial pneumonias*  
*Bacteremia and septicemia*  
*Acute follicular tonsillitis*  
*Septic sore throat • Pharyngitis*  
*Acute and chronic otitis media*  
*Acute bronchitis • Laryngotracheitis*  
*Tracheobronchitis • Sinusitis*  
*Chronic bronchiectasis*  
*Pulmonary infections associated*  
*with pancreatic insufficiency*  
*Scarlet fever • Urinary tract infections*  
*Acute and subacute purulent conjunctivitis*  
*Acute catarrhal conjunctivitis*  
*Chronic blepharoconjunctivitis*  
*not involving the meibomian gland*  
*Abscesses • Cellulitis*  
*Furunculosis • Impetigo*  
*Infections secondary to Acne vulgaris*  
*Erysipelas • Peritonitis*

## GRAM-NEGATIVE BACTERIAL INFECTIONS

*Gonorrhea • Brucellosis*  
*Bacteremia and septicemia*  
*Friedländer's pneumonia*  
*Mixed bacterial pneumonias*  
*Pertussis • Diffuse bronchopneumonia*  
*Post-partum endometritis • Granuloma inguinale*  
*Dysentery • Urinary tract infections*  
*Respiratory tract infections*  
*Cellulitis • Peritonitis • Tularemia*

## SPIROCHETAL INFECTIONS

*Syphilis • Yaws • Vincent's infection*

## RICKETTSIAL INFECTIONS

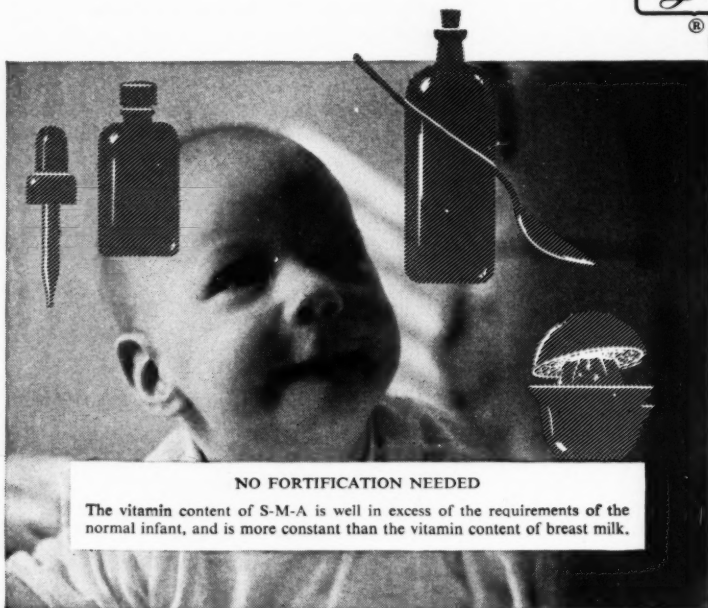
*Epidemic typhus • Murine typhus*  
*Scrub typhus • Rickettsialpox*  
*Q fever • Rocky Mountain spotted fever*

## VIRAL INFECTIONS

*Primary atypical pneumonia (virus pneumonia)*  
*Lymphogranuloma venereum • Trachoma*

## PROTOZOAL INFECTIONS

*Amebiasis*



#### NO FORTIFICATION NEEDED

The vitamin content of S-M-A is well in excess of the requirements of the normal infant, and is more constant than the vitamin content of breast milk.

### *A Complete, Protective Infant Food . . .*

**S-M-A**, diluted and ready to feed, provides in each quart the following proportions of the minimum daily requirements for infants.

<b>VITAMIN A</b> 5,000 U.S.P. units	333%
<b>VITAMIN D</b> 800 U.S.P. units	200%
<b>THIAMINE</b> 0.67 mg.	250%
<b>RIBOFLAVIN</b> 1 mg.	200%
<b>VITAMIN C</b> 50 mg.	500%
<b>NIACINAMIDE</b> 5 mg.	—

Ready-to-feed S-M-A is the most complete formula for infants. Its protective vitamins are administered in the most satisfactory way—right in the food and in each feeding. No danger of forgetting, no extra burden for busy mothers.

No infant food is more like breast milk than S-M-A—in content of protein, fat, carbohydrates and ash, in chemical constants of the fat and in physical properties.

**S-M-A CONCENTRATED LIQUID**—cans of 13 fl. oz.

**S-M-A POWDER**—1 lb. cans



**S-M-A<sup>®</sup>**  
*vitamin C added*  
*builds husky babies*

Wyeth Incorporated, Philadelphia 2, Pa.

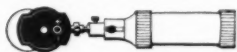
*Effective against many  
bacterial and rickettsial infections, as well as  
certain protozoal and large viral diseases.*

# AUREOMYCIN

Hydrochloride Crystalline

*Lederle*

The Ophthalmologist now possesses in aureomycin a therapeutic agent effective against many infections of the eye, whether caused by bacteria or by large viruses. A half per cent solution is nonirritant to the conjunctiva, so that aureomycin may be given locally, systemically, or in both ways. It has been found of value in most types of conjunctivitis, as well as in dendritic keratitis and uveitis; and is of importance in the treatment of the acute stage of trachoma. Aureomycin is invaluable in both operative and nonoperative ophthalmology.



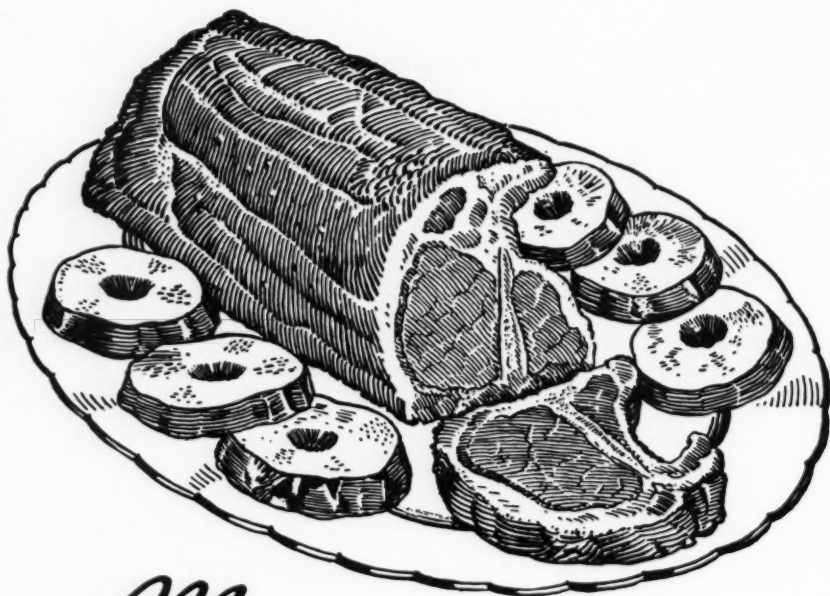
#### *Packages*

Capsules: Bottles of 25 and 100, 50 mg. each capsule. Bottles of 16 and 100, 250 mg. each capsule.  
Ophthalmic: Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

LEDERLE LABORATORIES DIVISION

*AMERICAN Cyanamid COMPANY*

30 Rockefeller Plaza, New York 20, N. Y.



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## Outstanding Value...

### Outstanding Nutritional Benefits

Whether the pocketbook calls for economy or permits satisfaction of that urge for the fanciest cuts, meat gives your patients full value for their money. Every cut and kind of meat supplies, *in abundance*, these essential nutrients:

1. Biologically complete protein... the kind which satisfies the requirements for growth and which is needed daily for tissue maintenance, antibody formation, hemoglobin synthesis, and good physical condition.
2. The essential B complex vitamins, thiamine, riboflavin, and niacin.
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The instinctive choice of meat as man's favorite protein food has behind it sound nutritional justification.\*



The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

\*McLester, J. S.: Protein Comes Into Its Own, J.A.M.A. 139:897 (Apr. 2,) 1949

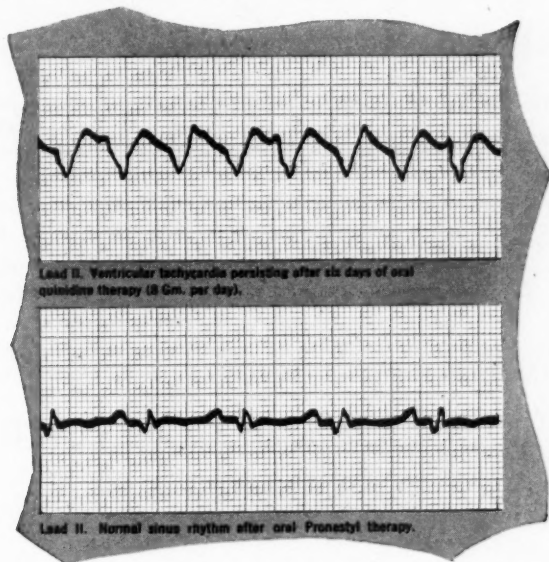
**American Meat Institute**  
Main Office, Chicago...Members Throughout the United States

a **new** drug . . .

*for the treatment of ventricular arrhythmias*

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*Squibb Procaine Amide Hydrochloride*



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Pronestyl Hydrochloride Capsules, 0.25 Gm., bottles of 100 and 1000.  
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**LACTOGEN<sup>®</sup>**

When the supply of breast milk is inadequate or when lactation fails entirely, there is no better formula than Lactogen. Designed to resemble mother's milk, it consists of whole cow's milk modified with milk fat and milk sugar. It differs, however, in one important respect: the protein content of Lactogen in normal dilution is one-third greater than that of mother's milk—2.0% instead of 1.5%.

*A Complete Infant Formula In One Package*


Lactogen contains all the ingredients of a well-balanced infant formula. In addition, it is fortified with iron to compensate for the deficiency of this mineral in milk.

*Easily Prepared... Merely Add Water*

Lactogen is simple to use. The prescribed amount is stirred into warm, previously boiled water. Either a single feeding can be prepared, or the entire day's quantity can be made up and stored in the refrigerator until used.

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COLORADO SPRINGS, COLORADO

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"No Finer Milk Can Be Produced"



**NOTABLY HIGH IN PROTEIN CONTENT**  
Lactogen contains a generous amount of protein... more than enough to satisfy every protein need of the rapidly growing infant.

**"Nowhere in medicine are more dramatic therapeutic effects obtained than those which follow estrogen therapy in the girl who has failed to develop sexually. A daily dose of 2.5 to 3.75 mg. of 'Premarin' given in a cyclic fashion for several months may bring about striking adolescent changes in these individuals."\***

\*  
Hamblen, E. C.: Some Aspects  
of Sex Endocrinology  
in General Practice,  
North Carolina M. J.  
7:533 (Oct.) 1946.



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*Estrogenic  
Substances  
(water-soluble)  
also known as  
Conjugated  
Estrogens  
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"Premarin"—a naturally occurring conjugated estrogen—long a choice of physicians treating the climacteric—has been earning further clinical acclaim as replacement therapy in hypogenitalism.

In the treatment of hypogenitalism, the aim of "Premarin" therapy is to develop the reproductive and accessory sex organs to a state compatible with normal function.

Four potencies of "Premarin" permit flexibility of dosage: 2.5 mg., 1.25 mg., 0.625 mg., and 0.3 mg. tablets; also in liquid form, 0.625 mg. in each 4 cc. (1 teaspoonful).

"Premarin" contains estrone sulfate plus the sulfates of equilin, equilenin,  $\beta$ -estradiol and  $\beta$ -dihydroequilenin. Other  $\alpha$ - and  $\beta$ -estrogenic "diols" are also present in varying amounts as water-soluble conjugates.



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## Neo-Synephrine®

HYDROCHLORIDE

BRAND OF PHENYLEPHRINE HYDROCHLORIDE

### *Prompt and Prolonged Hay Fever Relief*

Neo-Synephrine acts quickly to relieve the distress of hay fever, shrinks the engorged mucous membranes, checks hypersecretion, permits free breathing and promotes comfort.

It is notable for its

- excellent tolerance
- relative freedom from compensatory congestion
- lack of appreciable interference with ciliary action

Its effectiveness is undiminished by repeated use—insuring topical relief throughout the hay fever season.

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Ophthalmic Use: ¼% low surface tension, aqueous solution, isotonic with tears, ½ oz. bottles.

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# DELAWARE STATE MEDICAL JOURNAL

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## MORTALITY REGISTRATION PROBLEMS

FLOYD I. HUDSON, M. D., M. P. H.,\*  
Dover, Del.

Physicians for many years have been certifying causes of death on individual death certificates. As State Registrar of Vital Statistics it is apparent from the information recorded on many certificates that there is some misunderstanding of how the cause of death should be recorded by the certifying physician. In order to clarify this situation and increase accuracy in the recording of deaths, the following is offered:

For all practical purposes the registration of deaths in Delaware is complete. This fact receives material impetus from the system requiring burial permits, issued by local and sub-registrars, upon presentation of a certificate of death. These certificates, when recorded, form a basis upon which the total mortality per unit of population for the state, and the mortality rates for special diseases such as tuberculosis, is computed.

The crude death rate shows how many persons died per unit of population each year. There are some obvious errors due to the estimating of the state population in intercensal years, but for all intents and purposes the annual crude death rate and special death rates are remarkably accurate.

### INTERNATIONAL LIST OF CAUSES OF DEATH

We have been accustomed to using this statistical classification during the lifetime of most of us for the purpose of selecting an acceptable term to designate a cause of death. It was realized many years ago that no useful data could come from compiling a list of deaths described by the thousands of terms used by medical science. Therefore in 1893 the International Statistical Institute meeting in Chicago adopted a list of causes of deaths

which forms a basis for our present classification. This list was of great assistance in recording death statistics which could be compared state-to-state. However, the need for international comparisons was recognized, and a conference was held in Paris in 1900 to accomplish a list of causes of death which would be acceptable throughout the world. Conferences to revise this international list of causes of death were held, also in Paris, in 1910, 1920, 1929 and 1938. In 1948 the Paris Conference had become fully aware of the necessity of a standard list, not only for recording deaths, but also for recording diseases and injuries. Out of the 1948 Paris Conference came the sixth revision of the list, which was expanded to take in causes of sickness, and which was termed "International Statistical Classification of Diseases, Injuries, and Causes of Death."

The changes made in the sixth revision have affected in many instances the comparability of death statistics recorded up to 1949 with those recorded since that time. For example, under the old rules a person dying of incarcerated hernia along with tuberculosis would have been assigned to tuberculosis. Under the revised classification such a death would be ascribed to the hernia. However, keeping the revisions in mind, it is possible to keep records so that corrections can be made in many instances.

### SELECTION OF APPROPRIATE CAUSE OF DEATH

From the point of view of a Health Officer, it is of importance to first ascertain the underlying cause; that is, the first occurrence leading up to a death in order that preventive measures may be considered to control future untimely deaths from the same cause or causes. The data for the medical certification must of necessity be furnished by the attending physician. In order to secure this information in conformance with the recommendation of the World Health Organization, the Medical

\*Executive Secretary and Registrar of Vital Statistics, Delaware State Board of Health.

Certification on Delaware death certificates was changed beginning in 1949 as reproduced below:

#### CAUSE OF DEATH

#### I. DISEASE OR CONDITION DIRECTLY LEADING TO DEATH

(This does not mean the mode of dying, e.g. heart failure, asthenia, etc. It means the disease, injury or complication which caused death.)

(a) .....

#### ANTECEDENT CAUSES

Diseases or conditions, if any, giving rise to the above cause (a) stating the underlying condition last.

Due to

(b) .....

Due to

(c) .....

#### II. OTHER SIGNIFICANT CONDITIONS contributing to the death, but not related to the disease or condition causing it.

Part I is intended to show the cause leading to death and antecedent causes if there are any. The *underlying or direct cause* should be written last.

Part II is to show other significant conditions leading to death but not related to the direct cause.

When a single cause describes the death adequately — as lobar pneumonia — it should be entered in line I (a), and lines I (b) and I (c) left blank. Should two or more causes be entered in logical order, the one last shown will normally be considered the underlying or direct cause. Part II is important because it at times furnishes clarification of data in Part I and also gives us the number of persons who died in a given period who also suffered from another disease which did not cause the death. For example it shows us how many of the deceased had cancer and yet died of some other condition. Therefore, every physician who signs a death certificate is asked to recognize the importance of entering the causes of death in proper order so that there will be no doubt as to which in his opinion is the underlying one. It is realized that in certain cases information available to the physician may be incomplete or vague and that an adequate description of the cause of death may be most difficult.

The following examples of certifications will serve to illustrate proper procedure:

#### 1) I—a Peritonitis

b Intestinal Obstruction

c Appendicitis

#### II Pulmonary Tuberculosis

Before 1949 this death would have been assigned to tuberculosis; now it is assigned to appendicitis.

#### 2) I—a Uremia

b Acute Glomerulo Nephritis

c Septic sore throat

This death is assigned to the last given cause under both the old and new systems.

#### 3) Ia Gangrene of left foot

b Septicemia

c Diabetes

This death would be assigned to the last cause; the other two conditions under the new international rules are considered secondary to the diabetes.

#### 4) Ia Coronary Occlusion

b \_\_\_\_\_

c \_\_\_\_\_

#### II Cancer of prostate

The new rules give this to coronary occlusion; under the 1938 rules this would have been assigned to cancer.

The last revision of the International List and the accompanying changes in statistical methods have brought about a situation wherein death statistics prior to 1949 are no longer directly comparable with those since the implementation of the new system in the above mentioned year. This is unfortunate in some respects, but the gain will eventually outweigh the loss in giving us much better relative weights for the numerous causes of death, and these causes will be comparable state-to-state and nation-to-nation.

### MEDICAL ASPECTS OF CIVILIAN DEFENSE

EDWARD F. GLIWA, M. D.\*

Wilmington, Del.

Although civilian defense is the responsibility of the entire community, the medical and allied professions will play a major role in the event of total war, especially since the

\*Deputy State Health Officer for New Castle County, Delaware State Board of Health.

advent of atomic missiles. One need only recall the amount of destruction and the number of casualties which resulted from the use of the atomic bomb on the two Japanese cities during World War II to realize the importance of preparing a civilian defense program. The medical problems of major importance are those dealing with the treatment of casualties and the prevention of epidemic diseases. It stands to reason that the proper time to prepare for such a large catastrophe is before, not after the disaster occurs; and in this way we can expect to save many lives which ordinarily would be lost.

To meet an emergency of this type, many buildings constructed for other purposes will need to be used as emergency hospitals. In order to formulate a reasonable plan, a large number of persons whose normal activities are quite different from medical work will be needed. At least one person in ten must be instructed in first-aid techniques; also, many persons in fields allied to medicine will need training to do particular jobs ordinarily considered to be those for physicians, skilled nurses, anesthetists, laboratory technicians and the like. It is our responsibility as physicians to train or to supervise the training of these individuals. The training of an adequate number of personnel will be an enormous task, but not an impossible one.

Other needs will be to provide personnel for the detection of radiation, chemical, and biological warfare hazards. Facilities for evacuation and transportation of casualties must be maintained. An adequate supply of food, clothing, and medical equipment must be procured and stored. It is our responsibility to assist in the selection of medical equipment to assure a near adequate supply for the treatment of the resulting casualties.

Although the local city and state government is responsible for the organization of a civilian defense program, we should all familiarize ourselves with the problems involved, and should stimulate and accelerate a sound program.

Since the medical profession will represent an integral part of a defense program, we must take a leading part in formulating a state of real preparation which will reduce the human toll in the event of total war.

### NURSING PARTICIPATION IN DELAWARE'S CIVIL DEFENSE PROGRAM

MARY M. KLAES, R. N., B. S.\*,  
Dover, Del.

Nursing services are always auxiliary to medical services, and nowhere is this truer than in the civil defense organization on the national, state, or local level. When one considers the structure of civil defense which must reach out into every phase of everyday life one can readily see why the over-all structure of civil defense must of necessity be complex. It is therefore most important that all nursing civil defense activities be planned and carried out within the framework of the organization and plans of the Medical Division of the State Office of Civil Defense.

In Delaware the Civil Defense Nursing Chairman was appointed by the director of the medical services division. In order to coordinate the civil defense efforts of the nursing profession with that of the medical division, the civil defense nursing chairman of the Delaware office of Civil Defense was also appointed by the Delaware State Nurses' Association as their civil defense chairman.

A Civil Defense Nursing Committee was set up which was composed of the Chairman, the President, and the Executive Secretary of the Delaware State Nurses' Association, Industrial Nurses' Section, Private Duty Section, Public Health Nurses Section and the General Duty Section. A representative from each of the other nurses organizations in Delaware, the Delaware League of Nursing Education, Delaware Chapter American Red Cross, and the Wilmington Visiting Nurses' Association are also included in the membership of the Civil Defense Nursing Committee. This broad membership reaches into all branches of the nursing profession in Delaware. A chairman for New Castle County including the City of Wilmington has been appointed by the group. It is felt that every area of professional nursing activities can be reached and utilized by the Medical Division of the State Office of Civil Defense.

In November, 1950, six nurses from Delaware attended the week's course of instruc-

\*Director, Division of Public Health Nursing, Delaware State Board of Health, and Chairman State Civil Defense Nursing Committee.



tion for professional nurses in "Nursing Aspects of Atomic Warfare" which was conducted at the University of Rochester by personnel of the Atomic Energy Commission. Upon their return the nurses presented the material to other nursing groups in Delaware.

An Institute on Nursing Aspects of Atomic Warfare was planned and conducted by the committee in Wilmington on January 17th and 18th, 1951. Invitations were sent to all nurses with this foreword: "This is being sent to you because you are a professional registered nurse. We know all professional nurses have always shouldered their responsibility to give nursing care in time of disaster and we are confident they will continue this fine record."

The program content of the institute was planned to give nurses a background of information which will be helpful if disaster of major proportions occurs. The response to the invitation was overwhelming, a total of 738 nurses registered for the course at Delaware Hospital auditorium and at the Warner High School.

At the present time a roster is being prepared by the Civil Defense Nursing Committee which will list not only the name and address of every registered nurse in Delaware, but also the name and address of her place of employment, area of specialization and her availability. It is necessary to know these details in order that assignments can be made efficiently.

#### **HOSPITAL SURVEY AND CONSTRUCTION PROGRAM IN DELAWARE**

C. P. KNIGHT, M. D.,\*  
Dover, Del.

In August of 1946 a Congressional Act, popularly known as the Hill-Burton Act, was approved by the President of the United States. This legislation (Public Law #725) launched a comprehensive program of federal and state cooperation to provide all the states and territories with adequate hospital and health center facilities. The purpose of the Act is to assist the several states and terri-

tories to make an inventory and to evaluate the existing hospitals and health center facilities; to develop programs for construction of various facilities, and to construct the needed public and other non-profit hospitals and health centers in accordance with the program.

To assist in construction, Congress authorized 75 million dollars to be appropriated for the fiscal year ending June 30, 1947 and for each of the four succeeding years. These funds are allotted among the states in accordance with a formula based on population and per capita income. This makes available considerably larger amounts per capita to low income states.

To be eligible to receive federal funds each state must submit a plan and have it approved by the Surgeon General of the Public Health Service. One of the main requirements for approval is that the state must designate a single state agency to administer or supervise administration of a plan, and provide for the appointment of a state advisory committee or council. The plan must further provide for construction, insofar as financial resources permit, in the order of an established priority based on relative need.

#### **FEDERAL FUND ALLOTMENT TO DELAWARE**

The fact that Delaware is a high per capita income state, the allotment is rather small compared to that of many states. When the Hill-Burton Act became law the allotment to Delaware was only \$100,000 dollars per year for five years; however, in October 1948 the Act was amended doubling the federal appropriation; therefore Delaware received \$200,000 per year from that date. The total estimated allotment for five years is \$800,000. The states allotment may be drawn upon to pay approximately 1/3 of the cost of approved projects within the state; however, the law allowed the State Agency to establish a percentage of participation, so instead of the usual 1/3 federal share the percentage of participation was increased to 37.6% of the total cost of construction including purchase of certain equipment.

#### **SURVEY AND PLANNING**

Prior to the federal enactment, the Delaware legislature passed a law authorizing and directing the State Board of Health to make a survey of existing public and private hos-

\*Deputy State Health Officer and Director of Hospital Planning, Delaware State Board of Health.



pitals and health centers; to evaluate their sufficiency; and to compile data and conclusions and to provide for the acceptance and expenditure of funds.

The survey was started in the latter part of 1947 and finished in June of 1948. Based on this survey a state plan was formulated and was approved by the Surgeon General of the U. S. Public Health Service July 1, 1948. The prime object of the survey was to show the needs if any for additional hospital beds for medical care throughout the state.

In order to facilitate the equitable distribution of federal funds, Delaware's plan established a system of priority. This system gives full consideration to the factors outlined in the Hill-Burton Act, namely, the relative need for beds in an area and provisions for services for persons living in rural areas. All area priorities are based on the actual need as compared with a number of beds available to serve the community. In Delaware the areas were arranged in four priority groups on the basis of percentages of needs met as follows:

1 area in Group A showed 0-39.9 of needs met.

2 areas in Group B showed 40%-60% of needs met.

There was no area falling in Group C where 60%-80% would have been the percentages of needs met.

2 areas in Group D showed 80%-100% of needs met.

It was found that the highest percentage of priority was in rural areas. To be more specific, the lack of hospital facilities was greatest in the southwest portion of Sussex County, while the New Castle County area including Wilmington had been well taken care of with facilities for medical care. In other words the western part of Sussex County fell within the group of "A" priority while the Wilmington and New Castle County area was in Group "D". Kent County and East Sussex comes fully under Group "B" priority. It should be further explained that if a community in Group "A" priority could not, or would not, participate in the plan during a given fiscal year it was permissible for a community in the next priority group to request participation. Kent General Hospital, in Group "B," could qualify and made application for par-

ticipation. Their application was for the purpose of expansion of the existing hospital of obtaining additional needed hospital beds. To be more explicit, at the time Kent General Hospital made application, no community in Group "A," for various reasons, was prepared to take advantage of federal participation.

Before any application could be recommended for approval certain assurances had to be obtained from the applicant among which are: (1) that the facility will provide service without discrimination as to race, creed, or color, and will furnish a reasonable volume of free patient care (in areas where separate facilities are provided for separate population groups, the nondiscrimination requirement may be met through the planning of facilities which will make equitable provision for these groups); (2) that the facility, when completed, will be operated and maintained according to minimum standards set by the state; (3) that the construction contract will prescribe the minimum rates of pay for laborers and mechanics, as established by the Secretary of Labor; (4) that actual construction work will be performed by the lump sum (fixed price) contract method, and that adequate methods of obtaining competitive bidding will be used; (5) that adequate engineering or architectural supervision and inspection of the project will be provided to assure conformance with approved plans and specifications.

At this writing there are three projects under way and one finished. Kent General Hospital has now opened the new construction of 25 additional beds for the admission of patients. The projects listed in order of date of application are as follows:

- No. 1—Kent General Hospital—expansion
- No. 2—Nanticoke Memorial Hospital—new construction
- No. 3—Delaware State Hospital—expansion
- No. 4—Milford Memorial Hospital—expansion and construction of Nurses Home and Training Center

Construction costs for hospitals has greatly increased in the past few years and is continuing to climb. Since about 1947 the cost of construction per hospital bed has about tripled. Although construction costs seem exorbitant, serious thought had to be given looking forward to the preservation of health and

life of the citizens of the state. The cost per project is as follows:

Kent General Hospital—\$657,887.00.

Nanticoke Memorial Hospital—\$523,492.00.

Delaware State Hospital—\$719,830.00.

Milford Memorial Hospital—\$960,993.00.

At the present time the Nanticoke Memorial Hospital is constructing facilities for approximately thirty beds, but the community is planning to expand this as it is felt that in the future thirty beds will not suffice to meet the needs of medical care for the people in that part of the state.

At its last session the Delaware legislature passed an Act authorizing new construction for the care of tuberculosis patients. It is expected that federal funds will be available at the time to assist this new construction.

With all the new construction now under way there will for the present be approximately 95 additional beds available in general hospitals and 234 additional beds in the state-owned institution for mental cases. While this is encouraging the survey originally made showed that at least 80 more beds are needed in the Kent County area; 83 in southeastern portion of Sussex County, and 55 in southwestern part of Sussex County. If we are to meet the needs of the communities, and to give the people sufficient hospital care, the beds mentioned above should be constructed.

#### REFERENCES

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### THE DIAGNOSIS OF CONGENITAL SYPHILIS

WINDER L. PORTER, M. D., M. P. H.,\*  
Dover, Del.

The Delaware State Board of Health has recently completed an exhaustive survey of the problem of congenital syphilis in the state. The study embraced more than one hundred cases seen in the clinics of the state during a period of two years. A detailed report on the study was presented at the Regional Venereal Disease Control Conference conducted by the United States Public Health Service in New York City on May 18, 1951.

Thirty-five new cases of congenital syphilis were encountered in the clinics during the

period and nearly an equal number was reported by private physicians and institutions. The continued occurrence and persistent presence of this entirely preventable infection should be cause for much concern and indeed for shame. While perhaps some cases of congenital syphilis will continue to appear as long as any syphilis is endemic, opportunities are lost not only to prevent these infections but also to discover existing cases and bring them to treatment. The survey revealed many of these lost opportunities and also brought to light a number of problems encountered in the recognition of the disease.

The serologic test is itself responsible for much duress as the most definitive course necessitates quantitative estimation of the reagin titer. While there are tests utilizing blood collected in capillary tubes, the tests in general use require large volumes of blood and therefore more effort and attendant discomfort for the infant than parent or physician is willing to countenance. Refinement and more extensive use of tests adaptable to small quantities of blood are necessary steps towards earlier detection of congenital syphilis.

Interpretation of the serologic test is as important as the test itself. Per se, serologic tests on blood from the umbilical cord or from the newborn infant are of no value in establishing whether the infant is infected with syphilis, although they may have considerable value when correlated with all the clinical information in the case. Passive transfer of reagin from the mother's blood may cause a positive test in a child who itself has escaped infection, while an infected infant may give a negative test particularly when the mother acquired her disease late in pregnancy and there has been little time for serologic response. A single test at the age of three or four months is much more indicative of the status of the infant than the test secured at birth. Quantitative serologic testing of the newborn is of value, principally to establish a baseline. The true situation can then be well revealed by a series of tests at intervals of a few weeks. There usually is a prompt decline to negative when the child has escaped infection while the diseased child will develop or sustain a high titer although occasionally there is an initial fall in titer with a subse-

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quent delayed rise that becomes definite in a few months.

Increasing adoption of penicillin treatment makes it appropriate to mention the serologic response to treatment of congenital syphilis. Not unlike the result with acquired syphilis, a gratifying high percentage of cases show reversal of serology to negative when treated early, while the response in late cases is uncertain and of considerable less significance. Need for further treatment of these cases must be determined by the clinical course rather than the serologic response.

Early recognition of congenital syphilis in some instances must rest on clinical grounds and an alert suspiciousness. The classical picture of a weazened infant with potbelly and the face of an old man is not difficult to recognize, but interpretation of some of the less specific signs and symptoms of congenital syphilis offers many pitfalls. Perhaps most common is to pronounce "snuffles" in a newborn who is not doing well and has a runny nose, especially when the mother has a history of syphilis. It is not surprising that many of these respond almost dramatically to penicillin which after all is effective against a wide range of organisms. But one must be mindful that snuffles is seldom a solitary finding, but rather is usually accompanied by an actual rhinitis which may be hemorrhagic, with erosive lesions about the mouth and other distinctive skin eruptions. Furthermore, it is not apt to be seen in the newborn nursery as its appearance is usually delayed until the infant is a few weeks old. When seen earlier, there usually is other severe involvement and a correspondingly poor prognosis.

The rash of congenital syphilis is often distinctive, but eczema, diaper dermatitis and other benign skin disorders of infancy are mistaken for it. Not even when the eruption has a copper hue and involves the palms and soles, is it necessarily syphilitic. Conversely, syphilis is often passed off as chicken pox, impetigo or allergic dermatitis. Fortunately, darkfield examination can often promptly clear up a doubtful situation.

Changes in the bones and cartilages are

common features of congenital lues but one must be wary of diagnoses based upon those changes alone. The x-ray appearance may be distinctive but even the experienced roentgenologist is at times hard pressed to distinguish them from nutritional or other disorders, and is relieved to have serological or other confirmation. Similarly, enlargement of the liver or spleen with or without jaundice may also suggest syphilis but should comprise only part of a total picture and needs corroborative evidence for indictment as a leutic manifestation.

Recognition of later stages of congenital syphilis is simplified when one bears in mind that the course is similar to that of acquired syphilis with the important modification that its occurrence during a period of rapid growth and development may seriously interfere with these processes. There, however, is the general pattern of a self-limiting early infection followed by an indefinite latent period with the ultimate appearance of late signs which are recognized as stigmata whether they be active lesions or scars of previous processes. Thorough acquaintance with the manifold forms of these stigmata is essential as there likewise is the tendency for progressive spontaneous sero-reversal with an increasing number of late cases that escape detection by the serologic test or ordinary clinical examination. There may be reactivation of reagin response when late lesions flare up, but the examiner of children and young adults can often detect evidence of congenital syphilis without the aid of the blood test. Hutchinsonian teeth, interstitial keratitis and mental deficiency are familiar signs, but the examiner must also be alert for frontal bossing, scarred corneae, pegged teeth, circumoral fissuring, deafness, optic nerve palsies, swollen knees and saber shins. Experience alone can give full appreciation for the characteristic facies, but half of the battle is to become conscious of its existence and alert for its appearance. The disease as a whole is a challenge to clinical acumen, but actually the sequence of events is orderly and fits readily into a comprehensible picture.

# THE CANCER PROGRAM OF THE STATE BOARD OF HEALTH Report No. 5

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and  
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Since its beginning in 1947 the cancer program has steadily progressed. A report of this progress has been made to the physicians of Delaware each year in *The Journal*. In this, the 5th Annual Report, we will consider

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first our activities for the past year, and secondly our plans for the coming year.

Statistical tables for cancer incidence based upon reporting of neoplasm by the practicing physicians of the state are presented. It is felt that the reporting of neoplasms by physicians is practically complete. During the coming year a thorough check of our records will be made in order to determine the exact percentage of completeness of reporting. We appreciate the cooperation of the physicians in these efforts. These tables are set up along the same lines as those published in previous years. Hodgkins disease and leukemia are included in all tables.

Table 1  
Cancer Incidence of the White Population by Age, Sex and Site  
Delaware 1950

SITE	SEX	ALL AGES	AGE											AGE UNKNOWN	
			-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99			
ALL SITES	M		4	3	7	13	40	57	88	87	32	0	17	348	
	F		4	1	11	32	64	87	94	50	22	1	10	376	
BUCCAL CAVITY	M	20	0	0	0	0	2	3	7	5	2	0	1		
AND PHARYNX	F	6	1	0	0	0	1	1	2	1	0	0	0		
DIGESTIVE SYSTEM	M	68	0	1	2	8	14	20	16	4	0	2	2		
AND PERITONEUM	F	63	0	0	3	2	8	15	25	7	2	0	1		
RESPIRATORY	M	29	0	0	0	0	2	12	10	4	0	0	1		
SYSTEM	F	2	0	0	0	0	0	0	2	0	0	0	0		
UTERUS	F	87	0	0	2	15	19	22	23	2	1	0	3		
OTHER GENITALIA	F	25	0	0	0	4	7	7	4	3		0	0		
BREAST	F	64	0	0	1	6	15	8	18	10	5	0	1		
GENITAL ORGANS	M	33	0	0	4	2	4	0	8	13	2	0	0		
URINARY	M	24	0	0	0	1	2	5	7	7	2	0	0		
SYSTEM	F	11	1	0	0	0	0	2	3	3	2	0	0		
SKIN	M	80	0	0	1	2	6	13	15	23	13		7		
	F	58	0	0	1	1	9	18	7	12	5	1	4		
ALL OTHER	M	69	2	0	0	6	8	8	18	14	0	0	6		
SITES	F	50	0	0	4	1	5	13	10	9	0	0	1		

Source: Division of Cancer Control, State Board of Health, Delaware.

Table 2  
Cancer Incidence by Site, Sex, Color and Region  
Delaware 1950

		New Castle County exc.				Kent County	Sussex County	Delaware	% By Site of all White Cases	% All White Cases U. S.		
		Wilmington White Col.	Wilmington White Col.	White Col.	White Col.							
BUCCAL CAVITY	Male	7	1	2	0	6	2	5	0	20	3	10.6
	Female	4	0	1	0	0	0	1	0	6	0	3.7
DIGESTIVE SYSTEM	Male	29	4	14	2	11	0	14	2	68	8	26.4
	Female	31	4	17	3	5	2	13	2	63	11	22.9
RESPIRATORY SYSTEM	Male	15	2	8	0	3	0	3	0	29	2	8.0
	Female	1	0	1	0	0	0	0	0	2	0	4.2
UTERUS	Female	41	10	24	2	9	1	13	1	87	14	12.8
	Female	11	2	4	0	5	0	5	1	25	3	3.6
OTHER GENITALIA	Male	2	0	3	0	0	0	0	0	5	0	23.7
	Female	29	3	15	0	12	1	8	2	64	6	9.5
MALE GENITAL ORGANS	Male	11	3	9	2	6	1	7	0	33	6	5.0
	Male	11	1	7	1	2	1	4	0	24	3	7.2
URINARY TRACT	Female	7	1	2	0	1	0	1	0	11	1	5.0
	Male	39	0	17	0	11	0	13	0	80	0	17.4
SKIN	Female	33	0	13	0	5	0	7	0	58	0	17.5
	Male	1	0	5	0	0	0	1	0	7	0	11.4
NERVOUS SYSTEM	Female	2	0	2	0	0	0	0	0	4	0	1.4
	Male	3	1	1	0	0	0	1	0	5	1	
HODGKINS DISEASE	Female	2	0	1	0	0	0	0	0	3	0	1.1
	Male	3	0	2	0	0	1	3	0	8	1	
LEUKEMIA	Female	2	0	1	0	0	0	0	0	3	0	1.5
	Male	29	3	11	0	12	0	17	2	69	5	9.4
ALL OTHER SITES	Female	27	0	6	0	7	0	10	0	50	0	7.7
	Male	150	15	79	5	51	5	68	4	348	29	100.0
TOTAL BY SEX & RACE	Female	190	20	87	5	44	4	55	6	376	35	100.0
TOTAL		340	35	166	10	95	9	123	10	724	64	

\*Based on 10 urban areas of the United States, 1937-1939

Source: Division of Cancer Control, State Board of Health, Delaware

**Table 3**  
**Cancer Incidence by Age, Sex, Color and Region**  
**Delaware 1950**

AGE AND SEX		Delaware White Col.		Sussex White Col.		Kent White Col.		New Castle excluding Wilmington White Col.		Wilmington White Col.	
ALL AGES	M	348	29	68	4	51	5	79	5	150	15
	F	376	35	55	6	44	4	87	5	190	20
- 9	M	4	0	2	0	0	0	0	0	2	0
	F	4	0	0	0	0	0	2	0	2	0
10 - 19	M	3	1	0	0	1	1	2	0	0	0
	F	1	0	0	0	0	0	0	0	1	0
20 - 29	M	7	2	0	0	0	0	4	1	3	1
	F	11	2	3	0	0	0	3	0	5	2
30 - 39	M	13	1	2	0	2	0	4	0	5	1
	F	32	8	6	2	1	1	10	0	15	5
40 - 49	M	40	3	8	0	7	0	9	0	16	3
	F	64	8	12	2	8	1	14	0	30	5
50 - 59	M	57	7	8	0	8	1	15	1	26	5
	F	87	7	10	2	14	0	19	4	44	1
60 - 69	M	88	11	17	4	13	2	22	1	36	4
	F	94	7	12	0	11	1	23	0	48	6
70 - 79	M	87	2	19	0	15	0	15	2	38	0
	F	50	3	9	0	4	1	8	1	29	1
80 - 89	M	32	1	7	0	4	1	6	0	15	0
	F	22	0	3	0	3	0	5	0	11	0
90 - 99	M	0	0	0	0	0	0	0	0	0	0
	F	1	0	0	0	0	0	0	0	1	0
100 -	M	0	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0
Age Unknown	M	17	1	5	0	1	0	2	0	9	1
	F	10	0	0	0	3	0	3	0	4	0

Source: Division of Cancer Control, State Board of Health, Delaware

The Cancer Bulletin, Delaware edition, continues to be mailed every two months to all physicians and dentists on our mailing list. If we have omitted any physicians or dentists from the mailing list we would appreciate being informed of the omission. We have had several requests from physicians outside the state for this publication. It is gratifying to report the widespread interest in this publication.

Follow-up services by the generalized nursing staff of the State Board of Health are available to all physicians. More requests for such service are being received each year. In practically all instances the follow-up visits have resulted in return of the patient to the physician or information of his condition obtained for the physician.

Results of our three new projects of the past year are as follows:

(1) The Mobile Cancer Detection Unit. All communities with the exception of those served by Cancer Detection Centers of the hospitals and American Cancer Society have been visited at least every six months. For the twelve months ending August 1, 1951, 1416 examinations were made. Many non-cancerous conditions were found and referred to their physicians for treatment. Five early carcinomas of the uterine cervix were discov-

ered and brought to treatment. It is planned to continue operation of the Mobile Cancer Detection Unit.

(2) Provision for pathological examinations and biopsy specimens. This service has been used in a limited manner by the physicians. It is hoped that more use will be made of this service during the coming year.

(3) Film on self-examination of breast. This film was first shown to all Medical Societies and subsequently to many women's clubs and groups. A large number of pamphlets in color on self examination of the breast have been procured as a supplement to this film. A copy of this pamphlet has been sent to each physician in the State. Further copies are available upon request if desired for office distribution. Another film has been procured and has been shown to the Medical Society. This film for professional groups deals with the diagnosis of gastro-intestinal cancer.

#### NEW PROJECTS FOR THE COMING YEARS

(1) A new system of record keeping utilizing punch cards suitable for analysis is being set up. It will take considerable time to transfer the information from the more than 6,000 old records to the new system. It is expected that this will be completed by July 1, 1952.

(2) Provisions for Papanicolaou cytologic



examination. During the past year a laboratory technician has attended Cornell University Medical School for training in Dr. Papanicolaou's method of cytological examination. This technician is now working in the State Board of Health Laboratory staining and screening the cervical smears prepared on the Mobile Cancer Detection Unit. She is now prepared to give this service to the medical profession at large. Upon request physicians will be furnished materials necessary for the preparation of these slides. Reports of negative smears will be sent out from the State Board of Health Laboratory. Smears of Grade III and above are forwarded to a pathologist in Wilmington for study and grading.

### WE LIVE LONGER

CECIL A. MARSHALL, B. S.,\*

Dover, Del.

The extent to which man has succeeded in gaining control over his environment is perhaps best measured by the increase in his average length of life. In our country the record has been exceedingly favorable. The average length of life in the United States jumped from 49½ years at the beginning of the century to about 67½ years at the present time. Females made a better showing than males among both white and colored persons, thus widening further the longevity between the sexes. In 1947 the expectation of life among white females had exceeded by one-half year the biblical "three score and ten." For white males it was 65½ years. For non-whites the figures for females and males were 61½ and 57½ respectively. The prospects are bright for adding more years to the average length of life in the near future. The optimistic outlook is based on the assumption that wider and more intensive application will be made of existing knowledge in medical and sanitary science. It is expected at the same time, that future advances will be made in our standard of living, through better food and dietary habits, improved housing conditions, more ample protection against occupational hazards and accidents generally. These forces reinforcing each other can effect further reductions in mortality and thus improve longevity. The marked gains that we have made reflect

the advances in medical science and practice as well as general sanitary and environmental living conditions.

The death rate has reached an all time low. It is only about one-half that in 1911. Every age has benefited from the decline in mortality, but the decreases have been the largest in childhood and early adult life. Since 1910 the decline in mortality for males under 35 years has been 70% and 80% for females. But even in the 65-74 age group the decline has been 37 and 47 percent respectively for males and females.

An important factor in the favorable mortality record of recent years has been the relatively low incidence of the respiratory disease. In addition, the effective use of the newer methods of treatment reduced sharply the death rate from pneumonia. Only 6 years ago the death rate for influenza and pneumonia was twice as high as at present. Even more notable has been the record for tuberculosis. In the past 40 years this disease has dropped from first to seventh place. In the post war period the drop in mortality has proceeded at an accelerated rate, averaging about 10% a year. If this keeps up tuberculosis will soon be taking its place among the minor causes of death. Some factors behind these impressive gains have been the raised standard of living, the increased facilities for the detection and treatment of the disease, the isolation of large numbers of open cases, and the educational campaign to prevent the spread of the disease.

The drop in mortality from the principal communicable diseases of childhood has been nothing short of spectacular. For the four diseases of childhood — Measles, scarlet fever, whooping cough and diphtheria the death rate has declined nearly 98% in the past forty years. The infectious diseases have heretofore been the major targets of the medical sciences and the public health movement generally.

The hazards incidental to child bearing, which had long resisted efforts to control them, have been greatly reduced in fairly recent years. In the general population of the United States, the maternal mortality dropped from 4 per 1,000 live births in 1939 to about 1 per 1,000 in 1949.

\*Statistician, Delaware State Board of Health.



Diseases recording minimum death rates in 1949 include, in addition to those already mentioned, syphilis, appendicitis and the enteric group. Diarrhea and enteritis, and typhoid fever were important causes of death 40 years ago. In contrast with the marked downward trend in the mortality from many of the infectious diseases, the recorded death rates from the diseases of middle and later life have shown little change or have increased in the past 40 years. Much of this increase has arisen from the aging of the population. If allowance is made for the increased recognition and reporting of cancer as a cause of death it may well be that no rise has actually taken place in the mortality from cancer. The years of life sacrificed to cancer are second only to the toll exacted by the cardiovascular-renal diseases. The elimination of cancer as a cause of death would add 1.8 years to the expectation of life of white males and 2.5 years to that of white females. The figures vary little from birth to age 50, indicating that the increase in longevity would be achieved for the most part through the saving of people who are past midlife.

Deaths from diseases of the heart, arteries and kidneys are a dominant factor in the total mortality and account for nearly half of the total causes of death. By far the greatest increase in the expectation of life at birth would be attained through the elimination of the cardiovascular-renal diseases; the gain would be almost 10 years for white men and 9 years for white women. The figures may appear surprisingly large in view of the fact that the mortality from these diseases shows a greater concentration at the older ages than any other cause of death. Yet such is the magnitude of the death rate from the cardiovascular-renal diseases past midlife that if they were eliminated, the remaining years of life to a man aged 50 would be increased an average of 10 years — from 22 additional years of life to 32 years. It may be unrealistic to talk about wiping out cardiovascular-renal diseases, but postponement is within the realm of reality.

The marked reduction in the death rate from accidents represents in large measure the reduced frequency of fatal mishaps in the home and industry. But even the death rate from motor vehicle accidents has been declining in

the past three years. In fact, the rate in 1949 was the lowest in three decades except for the year 1943, when travel was restricted. Based on mileage, the death rate from motor vehicle accidents reached a new minimum in 1949.

Remarkable progress has been made in improving the health and longevity of the American people in the past half century, and the outlook is bright for future gains. More effective use of the measures which have already proved so successful will yield a still greater harvest of life. More and better medical and hospital facilities and services will likewise make a contribution toward this end, as will the intensive program of health education. In addition, newer knowledge is rapidly being accumulated and put into practice. Major efforts from now on need to be concentrated on solving the problem of chronic diseases, which have become the chief cause of premature death in our country.

#### **STREAM MORBIDITY REPORT**

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Dover, Del.

During the past fifteen months various streams within the state of Delaware have been subjected to examination, analysis, and diagnosis relative to their physical, chemical, and biological well-being. Emphasis was placed upon the present causes of "illness," future detrimental influences, and needed treatment for satisfactory recovery.

Numerous people have the erroneous conception that water, our most important resource, is unlimited. Its preservation is a matter of paramount importance. Although water, like the human body, has the ability to recover or self-purify itself after receiving foreign bodies, it cannot do so if the foreign bodies are too numerous or excessive. The time for a body of fresh water, within our state, to flow from its headwaters to the Delaware River or Bay is relatively short, thus decreasing the period of time for self-purification. Consequently, the amount of pollution the stream may digest without ill effect becomes a limiting factor of its self-purification.

Our first stream survey was made on the

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Broadkill River Drainage Basin. Analyses and measurements were made on the waters of this basin, and it was concluded that the sources of infection to the Broadkill River originate from poultry packing, canning, and municipal wastes. The degree of contamination from each varies considerably. Based upon the findings, recommendations were made to the offenders relative to their specific problems.

A study made of the Mispillion River Drainage Basin indicated the sources of pollution affecting the quality of the waters within this basin originate from municipal, canning and poultry packing establishments.

The Appoquinimink River Drainage Basin was also investigated, and was found to be relatively free of damaging pollution.

Considerable time and effort had been expended in making the study of the Christina River Drainage Basin during the past ten months. This basin is the largest and most complex in the state of Delaware. It includes the Upper Christina River, White Clay, Red Clay and Brandywine Creeks, with all their tributaries. Three surface domestic water supplies of our state are obtained from these streams and given treatment before human consumption. To complicate matters, approximately sixty-five per cent of the state's population reside in this area, in addition to a heavy concentration of industry. Each discharges much pollution to the streams.

Coinciding with our study of the Christina Basin, major strides are being taken to expedite the construction of numerous sewer interceptors which will, in the near future, discharge into the anticipated Wilmington Waste Treatment Plant. Most of the present pollution problems in this basin area will be alleviated. This removal of pollution from the tributaries of the Christina River should prove a boom to the protection of health, comfort and property of the people throughout this part of the state.

## FLUORIDATION OF PUBLIC WATER SUPPLIES

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and

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Dover, Del.

Recent discoveries in the field of dentistry now point to the fluoridation of public water supplies as the most effective means of reducing tooth decay among children. Because of its easy application for large numbers of people and its relatively low cost, it is believed by the American Dental Association<sup>1</sup> to hold more hope for the prevention of caries than any of the preventive methods in present usage, including toothbrushing, restriction in the consumption of concentrated sugar and topical application of sodium fluoride.

The present interest in fluoridation of public water supplies as a means of reducing tooth decay emanates from early studies to determine the cause of dental fluorosis or mottled enamel. Although reports indicating an association between mottled enamel and a low incidence of caries had been received from other parts of the world where public waters were known to contain fluorides, such studies had not been attempted here.

Black and McKay<sup>2</sup> were the first to investigate the possibilities in this country when they examined a group of children in the Rocky Mountain area where dental fluorosis was known to be prevalent, and reported fewer carious teeth than were found among children in non-endemic areas. Bunting, Crowley, Hard and Keller<sup>3</sup> investigated the dental caries problem in other areas where dental fluorosis is endemic and made a report similar to Black and McKay.

While McKay<sup>4</sup> was the first to associate fluorosis with water in 1925, the role played by fluorides as a causative agent was not established until 1931. Since that time numerous studies have been made in both endemic and non-endemic areas throughout the country. In a report published in 1938, H. C. Dean<sup>5</sup> of the United States Public Health Service pointed out that there were more caries-free children in various areas of endemic fluorosis in the West and Middle West

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than there were in those communities where the water contained little or no fluoride.

When scientific research covering a period of several years eventually proved the relationship between fluoridated waters, dental fluoris and tooth decay, further study was indicated to determine the amount of fluorine necessary to reduce caries, but not produce mottled enamel. Such studies have been made with the following conclusions; that dental caries could be reduced 65 per cent with only very mild fluorosis when the fluoride concentration did not exceed 1.5 parts per million (1.5 ppm.). Studies also revealed that to obtain the best results from fluoridated water, children must consume it during that period when the teeth are developing or from birth to about eight years of age.

These satisfactory conclusions having been reached, thoughts turned to the possibility of ways and means of providing some method by which fluorides may be made available to children everywhere and plans soon evolved for a series of experiments to determine whether fluorides added to the water supply artificially would prove as effective as naturally fluoridated water.

The first of such experiments was initiated in Grand Rapids, Michigan, in January, 1945. In May of the same year, another got under way in Newburgh, New York, and a third one was started at Sheboygan, Wisconsin in February of 1946. All are using a concentration of 1.0 ppm or slightly more.

While such experiments require from eight to ten years for completion, results thus far have been most gratifying. Grand Rapids reports that the caries experience of children five to seven years old is practically the same as that in children in the same age group in Aurora, Illinois, whose water supply contains much the same concentration of natural fluoride. In only five years of operation, reports indicate a caries reduction of 51.3 per cent among six-year-old children, 36.4 for nine-year-old children and 16.7 for those in the thirteen-year-old group, while Newburgh reports a 32.5 reduction in carious permanent teeth for children from six to twelve in four years.

Obviously fluoridation of public water supplies offers a partial solution to the tremendous

problem which has confronted the dental profession for many years. Unable to provide adequate dental care for more than 35 per cent of the population, the problem has taken on new proportions with the shortage of dental personnel and increasing demands for service from a dental-conscious public.

The American Dental Association was one of the first organizations to adopt a resolution endorsing the fluoridation of public water supplies. This was done at their annual convention in the fall of 1950 and since that time the majority of its constituent societies have taken similar action.

Individual community groups while sharing the opinion of the dental profession have looked upon fluoridation from another angle — the cost of dental care for great masses of people as compared with the cost of fluoridation. Now convinced that no harmful effects will be encountered by human beings or industries when the recommended fluoride concentrations are maintained, numerous cities throughout the country have undertaken fluoridation. Stadt<sup>6</sup> in a study released in May, 1951, reports 176 cities in 33 states with fluoridation in progress or approved. Since approximately 15,400 public water supplies provide 94,000,000 people with potable water, he believes it is possible that during 1951-52 more than 30 per cent of these people may be receiving fluoride-bearing water. He includes the 4,000,000 people living in areas where the natural fluoride concentration is 0.90 ppm or more.

The fluoride content of the public water supplies of Delaware is less than one part per million. As of July, 1951 Newark was the only community which had begun fluoridating their supply. Actual application of the chemical began in February 1951. In an attempt to determine the results of this treatment, the Delaware State Board of Health plans to examine the teeth of a group of Newark school children at intervals over a period of years. The findings of these examinations will be compared with those of a comparable group of children in another Delaware community which does not fluoridate. Some interest in the treatment has developed in one or two other Delaware communities.

Accurate equipment must be used to add

fluoride to drinking water as the amount in the water must be kept between 1.0 and 1.3 parts per million. Competent personnel must be provided to operate the equipment and to frequently test the water. The fluoride does not affect the taste, odor, color or turbidity of a water supply. It is estimated that the treatment will cost from 6 to 18 cents per person per year.

Fluoridation has been approved by several national organizations. Among those recommending this treatment are: U. S. Public Health Service; American Dental Association; and the American Public Health Association. The American Water Works Association has adopted a policy stating that "In communities where a strong public demand has developed and the procedure has the full approval of the local medical and dental societies, the local and state health authorities and others responsible for the communal health, water departments or companies may properly participate in a program of fluoridation."

The Delaware State Board of Health will approve the fluoridation of a community supply if a written request is received from the town officials and the following conditions are complied with:

1. The Board must receive a written request for approval of fluoridation of the city supply in question.
2. The written approval of the local governmental officials, of the local Board of Health and of the local organizations such as the Medical and Dental Societies, must be submitted to the Board.
3. Duplicate copies of plans and specifications showing the equipment to be installed must be submitted. If these plans are satisfactory, a written approval of the Board will be issued. The installation of the fluoridation facilities must not begin until this written approval is secured.
4. The community must provide competent personnel for the operation and control of the fluoridation equipment and for testing the amount of fluoride in the water. A satisfactory testing device must be provided.
5. A sufficient number of tests of the fluoride content must be made to make cer-

tain that the equipment is operating satisfactorily. During the first week of operation of this equipment, the fluoride content should be checked at least twice daily and a permanent record of the results of this test must be maintained. After this initial period, the fluoride content should be checked at least once each day, and a permanent record maintained. One copy of this permanent record must be submitted to the Delaware State Board of Health at the end of each month. The fluoride content of the water should be maintained between 1.0 and 1.3 parts per million.

#### REFERENCES

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### THE PROGRAM OF THE DIVISION OF CRIPPLED CHILDREN'S SERVICES

JACK SABLOFF, M. D.,\*

Dover, Del.

The State Board of Health is certain that every physician in Delaware is interested in knowing of the services it offers to the handicapped and crippled children of the state. With this thought in mind a brief outline of the program offered by the Division of Crippled Children's Services will be presented for the benefit of those physicians relatively new to the practice of medicine in Delaware and as a means of bringing the others up to date on expanded services.

#### GENERAL POLICY

The age limits for the program extend from birth through twenty-one years. Diagnostic services are available for all within these age limitations. Eligibility for treatment services, as distinguished from diagnostic services, is dependent upon the economic status of the family. Also, to be eligible for continued care a child must have or demonstrate upon a trial period sufficient mentality to benefit from treatment services.

\*Director, Maternal and Child Health and Crippled Children's Services, Delaware State Board of Health.

#### STAFF AND TYPES OF SERVICES AVAILABLE

A general idea of the types of service available can be obtained from an enumeration of the staff. Crippled children's clinics are conducted by two part-time qualified orthopedists. The full-time professional staff, in addition to the director, consists of two physical therapists, one occupational therapist, three speech therapists, one of whom acts as the coordinator of the Speech and Hearing Program, two audiologists, and two medical social workers. All full time staff meet the recognized qualifications in their respective fields.

Put in terms of the types of services rendered, these can be listed as follows: orthopedic supervision and care, physical therapy, occupational therapy, speech therapy, audiological services, medical social services. There is also a close association with the Division of Public Health Nursing and close cooperation with the public health nurses of the county health units at Georgetown, Dover, and Newark and of the city of Wilmington. They provide nursing services at the clinics and home follow-up.

#### TYPES OF CONDITIONS ACCEPTED BY THE PROGRAM

The conditions accepted by the program are as follows:

- All orthopedic conditions
- Birth injuries
- Cerebral palsy
- Conditions requiring plastic surgery  
(Example: cleft lip, cleft palate, contractures from burns)
- Certain conditions requiring neurological study or neuro-surgery  
(Example: hydrocephalus, spina-bifida)
- Speech deviations
- Hearing impairments
- Severe dental malocclusions

The acute phase of poliomyelitis is not accepted but orthopedic consultation is made available upon request.

#### CRIPPLED CHILDREN'S CLINICS

Clinics are conducted once every six weeks at each of the following locations: Dover, Milford, Georgetown and Seaford. Orthopedic and related cases are cared for through these clinics. The clinics are attended by a brace maker and a shoe man, in addition to

the orthopedic, nursing and social work staff. The clinical records from the central office in Dover are carried to clinic. Orthopedic shoes, braces, prostheses and other orthopedic appliances are furnished upon recommendation of the orthopedic consultants who conduct the clinics. X-rays as ordered by these orthopedic consultants are procured and their recommendations for physical therapy and occupational therapy are carried out by the appropriate technical members of the staff. Hospitalization is arranged in Delaware hospitals except for certain conditions, mainly neurosurgical in nature, which are referred to out-of-state hospitals, principally the University of Pennsylvania Hospital and Children's Hospital of Philadelphia.

#### THE ALFRED I. DUPONT INSTITUTE

A close relationship exists between the Alfred I. duPont Institute and the Division of Crippled Children's Services of the Delaware State Board of Health. The Institute conducts crippled children's clinics twice a week (Wednesdays and Fridays) and provides orthopedic services to the children residing in the Wilmington and New Castle County areas. The physical therapists, occupational therapist and a medical social worker of the Division of Crippled Children's Services are in attendance at these sessions. Clinic notes on those children who are receiving their medical supervision at the Alfred I. duPont Institute clinics are furnished to assist the State Board of Health staff in providing follow-up services. Occasionally cases are referred to the Institute clinics from the down-state clinics.

In addition to providing out-patient services for the orthopedically handicapped and those with related conditions, the Alfred I. duPont Institute provides hospitalization for these children up to the age of sixteen years. The types of patients admitted are those with disorders of the skeletal system such as infantile paralysis, congenital malformations, curvature of the spine, scar tissue contractures, etc., such as require the attention of the orthopedic and plastic surgeons. Children with mental disorders are not eligible for admission. Children from State Board of Health clinics who require hospitalization and who have conditions which are eligible for admission to the Institute are referred to that institution for



such hospital care. There is no charge to the state nor to the family of the child. The education of the child is continued by qualified school teachers employed at the Institute. Medical summaries of the hospitalization are provided to the Division.

#### GOVERNOR BACON HEALTH CENTER

The Governor Bacon Health Center is under the administration of the Board of Trustees of the Delaware State Hospital. A unit for the hospitalization of crippled children is conducted at this institution. The State Board of Health cooperates with the Center in providing care for crippled children by furnishing the part-time services of various professional staff, including a qualified orthopedist, a physical therapist, an occupational therapist, a medical social worker, speech therapists, and an audiologist. The Division of Crippled Children's Services also assists the Center by providing braces, prostheses and other such appliances for the orthopedically handicapped children who are under its care. The Center furnishes interim notes and discharge summaries to the Division.

The Center is used for the hospitalization of cases of cerebral palsy (cerebral palsied children are not accepted at the Alfred I. duPont Institute) and for many of the longer term orthopedic disabilities. There is an interchange of information between the two agencies on cases at the Center or children under the care of the division who are to be hospitalized there. Staff members of the Division of Crippled Children's Services also attend case conferences on handicapped children at the Center.

In general, the type of cases referred to the Center are those with long-term disabilities who can profit from a therapeutic regime and are not purely custodial care problems.

#### SPECIAL CEREBRAL PALSY CLINICS

The Division of Crippled Children's Services engages Dr. Winthrop M. Phelps of Baltimore, to conduct special orthopedic clinics for cerebral palsied patients. The problem patients to be seen are selected by the clinic staff. These special clinics are usually held once yearly and sessions are held at the Governor Bacon Health Center, the Alfred I. duPont Institute, Dover, and Georgetown.

Doctor Harold Westlake, Director of the

Speech and Hearing Clinic, Northwestern University, conducts special clinics related to speech problems of cerebral palsied children. In the past year the clinics conducted by Doctor Phelps and Doctor Westlake overlapped and some children were seen jointly by them.

#### SPEECH AND HEARING SERVICES

The speech and hearing program offers services to any child whose communication skills have not developed normally, whose speech deviates from the normal, or whose hearing is impaired. Diagnostic speech and hearing services are made available to all children up to the age limit of twenty-one. However, treatment services are limited to the pre-school group with the following exceptions: (a) when speech and hearing problems exist with certain organic conditions such as cerebral palsy and cleft palate; b) hearing therapy initiated in the pre-school age is continued, when indicated, into the school age as an adjunctive service to regular school attendance.

The State Board of Health assisted materially in equipping the Audiology and Speech Center of the Delaware Hospital, Wilmington. The Audiology and Speech Center and E.N.T. clinic of the Delaware Hospital are used for both diagnostic and treatment purposes. The Speech and Hearing Clinic of the Johns Hopkins Hospital in Baltimore is used when psycho-galvanic skin-resistance equipment must be employed in hearing testing of very young children. It is anticipated that the Audiology and Speech Center of the Delaware Hospital will be capable of doing such testing in the relatively near future, thus obviating the necessity of sending children to Johns Hopkins.

The treatment services offered by the program consist of otological and audiological examination, audiological and speech training, surgery related to the speech and hearing problem, radium and x-ray therapy, the furnishing of individual hearing aids.

#### ORTHODONTIA

This is a new program that is just being instituted. Its primary aim will be to accomplish speech rehabilitation in the cleft palate child, but other severe dental malocclusions will be given consideration. The program hopes to bring into close association the services of the plastic surgeon, the orthodontist



and the speech therapist. Qualified orthodontists in the state of Delaware are participating. The program will afford pedodontic services to cleft palate children under orthodontic care when this cannot be afforded privately. The program will also furnish speech appliances as indicated to the cleft palate cases under care.

#### COOPERATION WITH OTHER OFFICIAL AND VOLUNTARY AGENCIES

The Division of Crippled Children's Services cooperates with other agencies, both official and voluntary, in furnishing or developing services for crippled children in the state. It refers children to many other agencies for auxiliary services which are not available through the Division itself. An example of official agency referral is the use of the Mental Hygiene Clinic for psychometric and psychological testing, and for mental hygiene services. An illustration of the manner in which the Division cooperates with voluntary agencies is demonstrated in the treatment services provided the School for the Handicapped in Wilmington sponsored by the Delaware Society for Crippled Children and Adults. Here the Division furnishes the part-time services of its speech therapists and a physical therapist who work under the direction of a supervising orthopedist or clinic. This brings treatment services into close association with the educational program of these children.

#### CONCLUSION

The program prefers early referrals so that minor defects can be treated and improved or cured before they become major in nature. Another of its aims is assistance to children requiring expensive, long-term, coordinated specialized services — such as one encounters, for example, in the treatment of the cerebral palsied and cleft palate child.

The program welcomes the referrals it receives from the physicians in Delaware. Physicians could assist us by sending mailed written referrals rather than verbally directing patients to clinic. By so doing, they would enable the staff to more carefully control clinic attendance, and more efficiently plan their work. Reports will be sent to the referring physician.

#### ONE PHASE OF CORRELATION BETWEEN PEDIATRICS AND THE SPEECH AND HEARING SERVICES

MARIAN L. GILMORE, M. A.,\*

Dover, Del.

Speech and hearing services under the Crippled Children's Division of the State Board of Health were instituted in 1946 with a philosophy which emphasized prevention rather than correction and early referral rather than one which came too late. A re-evaluation of the program was in order in 1950 with Dr. William G. Hardy of the Hearing and Speech Center of Johns Hopkins Hospital as consultant. There emerged a decision to outline the program to the physicians of the state who see the largest number of pre-school children and to explain to them the necessity of early referrals. Since older children with speech and hearing problems appear to be in the greatest need because the therapy has been delayed or the family has not been concerned, the majority of referrals had been submitted for school-age children.

*It is important that a child with cerebral palsy be seen by a speech therapist as early as twenty months if there is indication that he does not attempt speech.* The therapist can begin work on the sucking and swallowing reflexes, on the tongue musculature and on the breathing mechanism much as the physical therapist works with other motor coordinations. The parents can play with him and talk to him in the same manner in which they do with any child of the same age in order to develop a readiness for speech.

*A child with a cleft palate should be followed by the speech therapist from the eighteenth or twentieth month.* The therapy will be coordinated with the work of the plastic surgeon and with the orthodontist and prosthetist if these treatment services are indicated.

*If a child's speech is delayed for other than organic reasons beyond the third birthday, a referral to the Speech and Hearing Services is indicated.* In many speech and hearing cases psychological evaluations are helpful, but they are particularly essential in this type of case.

*If the child "stutters" between the ages of*

\*Coordinator of Speech and Hearing Services (in collaboration with Miss Ruth Blattspieker and Mrs. Vivian Steffen), Delaware State Board of Health.

two and six, it may be part of normal speech development. When, however, the parent and/or the child is concerned, a referral should be made. Their reactions to this type of speech, however mild it may be, can produce real problems which are often preventable through discussions with a speech therapist. Much of this "stuttering" amounts to word repetitions. At an early age these are not usually considered actual stuttering because the child is merely passing through one stage of his speech development. These repetitions he outgrows. In other instances during the same period of development there are factors within the child's environment which will aggravate the word repetitions and produce real stuttering. Frequently one of these factors is an impatient parent who expects a higher level of performance in speech than the child is capable of giving at that time. Other factors produce an emotionally disturbed child whose stuttering is symptomatic. These children will probably need help in order to "outgrow" the stuttering. Some never will outgrow it, but may improve under therapy. Advising the parent to tell the child to "start over" or to "slow down" is no longer considered sound and can even be extremely harmful.

*Speech deviations which are articulatory in nature have a varied etiology.* Many of them, because of the strange substitutions of one sound for another, the omission of certain sounds or the distortion of others, would seem to be a perseveration of baby talk. Usually the parents feel that this must be eliminated before the child is admitted to school. If there is concern, a referral should be made, and if substitutions are numerous after the age of four, a referral is important. Most children speak without any sound substitutions by the age of seven.

*As soon as there is the slightest question about a child's hearing, he should be referred to these services where steps will be taken to evaluate the loss and to take every advantage in his training of any residual hearing he may have.* A parent may notice quite early that he is not responding to sound. The very

young child can now be tested accurately by a device known as the Psychogalvanic Skin Resistance Test\* which produces true results without voluntary response on the part of the child. The early training of these children is of maximum importance because not only the mechanism of speech is involved, but even more essential, language concepts must be established. Every child seen by the staff of these services is given a routine audiometric test.

Any physician can refer a child for a diagnostic speech interview by mailing one of the referral forms available through the Division of Crippled Children's Services, Delaware State Board of Health, Dover, Delaware. This form provides space for the following information: name of child, date of birth, address, phone number, names of parents, medical diagnosis, ability or inability to attend clinic, date of referral, comments and signature of physician.

Many physicians have asked for the title of a readable book for parents which discusses normal speech development and ways of helping a child to talk. Dr. Charles C. Van Riper has recently published "Teaching Your Child to Talk." This may be obtained by ordering through local book stores or by writing to Harper & Brothers, Publishers, New York City, New York. The price is two dollars.

It is interesting to note the change in the number of referrals from physicians to whom this program was explained a year ago.

Number of referrals from physicians from 1946 to Sept. 1950 . . . . . 20.

Number of referrals from physicians since Sept. 1950. . . . . 72.

The staff of the Speech and Hearing Services has appreciated the understanding and support of the physicians in the state. It is their intent to serve in the best possible way and to the extent that their personnel will permit.

\*Developed by Drs. John E. Bordley and William G. Hardy of Johns Hopkins Hospital.

## KEEPING OCCUPATIONAL THERAPY FUNCTIONAL

HERBERT C. VERRY, B. S., O. T. R.,\*  
Dover, Del.

Many modalities employed by occupational therapists have become familiar to doctors prescribing this type of treatment, but often the greatest value is not being derived from occupational therapy due to misunderstandings as to how it can be applied functionally. Too frequently, occupational therapy is regarded and used as merely a diversional activity, and its functional value overlooked, or under-emphasized. What are some of its functional applications? Orthopedically, for example, occupational therapy can be employed to build up range of joint motion, muscle strength, develop coordination, motor skills and work tolerance. Psychiatrically, occupational therapy can be utilized to offer a suitable outlet for aggression, provide relief for deep seated guilt feelings and contact with reality.

Even with post rheumatic fever cardiacs, and tuberculosis cases, occupational therapy has a definite functional value if applied properly and wisely. It is frequently assumed by those treating this type of patient that occupational therapy can do nothing more than keep the patients busy and contented enough to stay in an institution. At the very best, they feel that the "crafts" given the patient will only serve as a later hobby interest. In reality, it is possible to grade the type of activity to such a degree that each patient be allowed to do only those things which are within his tolerance limit. These gradations should be clearly defined by the doctor prescribing the treatment and understood by the therapist and everyone else working with the patient to make it most valuable. Before treatment is prescribed, it might be more helpful to the doctor to ask the therapist to give a detailed breakdown of each activity available and suggestions as to gradations of the activity. In the case of working either with cardiac or

tuberculosis patients, the occupational therapy time should be considered only in terms of its proper relationship to all other activity in which the patient participates during the day — not in terms of occupational therapy alone.

Functional occupational therapy in the treatment of cerebral palsy children has as its initial goal, self care — which includes feeding, toilet training, dressing and putting braces on and off. The age and physical involvement of the child determine in many cases whether the approach should be made directly with such equipment as large wooden shoes and button boards, or whether it is necessary to precede this with simple "play" activities in which conscious relaxation and motion from a relaxed position are primarily stressed. In either case, the therapy should be given individually to avoid outside distraction. Eventually, it is desirable to bring the child into a group situation that he might build up confidence and poise in working with others. At this stage, it is often possible to have the patient work on activities of a more complex nature such as weaving, knotting or netting which still employ the same general motions as were previously used but in an activity that stresses the ability rather than the inability of the patient.

Wherever and however occupational therapy is offered, it is desirable for the therapist to discuss with the physician exactly what treatment could be offered the patient. In some instances activities might have to be avoided since the equipment is not available. In the home treatment situation, the therapist would offer those activities which can be taught in relatively short time and for which equipment can be readily transported.

In conclusion let us remember that "Therapy means treatment, and occupational therapy is treatment by means of participation in occupations or activities devised to attack specific problems resulting from disease or injury."<sup>1</sup>

### REFERENCE

1. Willard, Helen S. and Spackman, Clara S.: Principles of Occupational Therapy. Philadelphia: J. B. Lippincott Co., 1947.

\*Occupational Therapist, Delaware State Board of Health.

### NUTRITION IN QUANTITY FOOD SERVICE

MARY T. DAVENPORT, M. S.,\*  
Dover, Del.

The State Board of Health offers consultant service in nutrition to the state's tax supported institutions which do not employ trained dietitians. Six institutions are visited regularly. This consultant service extends to a home for children and to the nursing homes within the state.

In these groups many of the people are elderly and healthy. Some are afflicted with terminal illnesses. Tuberculosis patients make up a share of this population. Boys and girls in industrial schools and a group of orphans complete the list.

Good nutrition cannot be achieved for these people just by serving three meals a day, well balanced and attractive as these meals may be. The physician in charge, the food service manager, all people involved in the food preparation and the dish washers must be aware of the tremendous effect the patient's or child's attitude may have upon his acceptance of food.

Some features that are marked for improvement are discussed below. These may respond by the cooperation of the above named personnel — the foundation for all work being to know the person who is fed as one of the group.

In feeding the aged one must recognize the loss of independent living as the patient joins a homogeneous group. The frustrations of old age can make adjustment difficult. Donohue states that, "Over-eating may reflect the emotional poverty of the older people whose days often contain so little of interest or value, that eating becomes the most important satisfaction and compensation of living."<sup>1</sup>

Respect for former food habits should be maintained wherever possible. Discussion of the food service with the patient is of inestimable value to everyone involved. Patronizing attitudes must be totally absent. Some groups are served 2 meals a day. This is to be discouraged. It is believed that greater assimilation of food, with less tax on the digestive system is the result of three to five light meals. When special diets are ordered, these should be discussed with the food service manager

and the patient, if the health of the latter permits. In no case should undue importance be placed upon a special diet because of the tendency to produce unnecessary introspection. Occasional observation should be made to determine the adherence to special diets.

Lawrason Brown writes of the tuberculosis patient, "Contradiction contradicts contradiction and the tuberculosis patient is described as anything between an insane criminal and a saint too ethereal for this mundane sphere. You can pick your articles and take your choice of his character."<sup>2</sup>

From experience we all know that the tuberculosis patient is easily angered and easily pleased. It requires the limitless ability and patience of a food service manager to provide the food that is so necessary in the recovery from tuberculosis. This is especially difficult where patterns of eating vary widely due to nationality, family customs, severity of the illness and the emotional maturity of the patient. Here again, it appears that mutual understanding of the procedures by the physician, the patient and the food service manager is of vital importance if a normal rate of recovery is expected. A group study of food nutrients with little, if any, reference to specific meals served by the sanatorium could develop a more nearly mature attitude toward a variety of foods.

Many girls in punitive institutions gain excessive amounts of weight. Too much carbohydrate in the diet and inactivity can lead to the ingestion of calories far in excess of needs. Glandular disturbances may be responsible for a portion of the overweight cases. In any event, group or individual instruction by the physician or other qualified personnel and the supervision of menus, as served and eaten, can result in better health through improved food habits. Advantage should be taken of this opportunity to develop an acceptance of most foods prepared in a variety of forms. Irregular habits of elimination could be corrected during this period. Proper food and proper toilet habits may do much to develop good elimination. A knowledge of the importance of this should not be overlooked.

Boys are reluctant to change food habits. However, this reluctance appears to be com-

\*Nutrition Consultant, Delaware State Board of Health.

compensated for by their not objecting to the repetition of food as long as the repetition does not approximate what would be termed monotony by the average person. At one institution, the medical staff has confirmed the writer's statement that a high degree of vitality and low incidence of illness are due, in part, to good nutrition.

In conclusion, satisfactory institutional food service can be derived by the establishment of standards for the group being served, the recognition of the food habits of the individual prior to his admission, an understanding, by everyone involved, of the methods being used and making use of any learning opportunities that the food service may offer.

## REFERENCES

1. Donahue, Wilma T.: Psychologic Aspects of Feeding the Aged J. Am. Dietet. Assn. 27: No. 6, June 1951.
2. Brown, Lawrason: The Mental Aspect in the Etiology and Treatment of Pulmonary Tuberculosis Internat. Clin., 3: 149, 1933.

## MEDICAL SOCIETY OF DELAWARE

**MONDAY, OCTOBER 8, 1951**

Hotel duPont — Hunt Room

7:00 P. M.—MEETING OF THE COUNCIL

8:30 P. M.—MEETING OF THE  
HOUSE OF DELEGATES

**TUESDAY, OCTOBER 9, 1951**

Hotel duPont — Gold Ball Room

GENERAL MEETING

9:30 A. M.—INVOCATION

**Rev. William F. Dunkle, D.D.,**

Pastor, Grace Methodist Church  
Wilmington.

9:40 A. M.—ADDRESS OF WELCOME

**Hon. James F. Hearn**

Mayor of Wilmington.

10:00 A. M.—REPORT OF HOUSE OF DELEGATES

**Andrew M. Gehret, M. D.,**

Secretary, Med. Soc. of Del.

10:10 A. M.—THE NAGAMATSU APPROACH TO  
THE KIDNEY (Color Movie)

**Brice S. Vallett, M. D., Wilmington**

Urologist, Delaware Hospital.

10:20 A. M.—THE DIAGNOSIS AND TREATMENT  
OF EPILEPSY

**Douglas T. Davidson, Jr., M. D.,  
Boston**

Assistant in Pediatrics, Harvard  
University.

Epilepsy is a disorder of many causes and almost infinite variation. Its diagnosis is based on evaluation of data obtained from history, physical examination and laboratory. Treatment by anti-epileptic drugs is today successful in the great majority of patients. Psychotherapy for the patient is as essential a part of his management as drug therapy.

Discussion: Drs. A. L. Ingram, Jr. and M. A. Tarumianz.

**11:00 A. M.—Visit the Exhibits**

**11:30 A. M.—CRANIOCEREBRAL TRAUMA**

**Richard G. Coblenz, M. D., Balto.**

Clinical Professor of Neurological  
Surgery, University of Maryland.

It is important that the general practitioner and especially the general surgeon be thoroughly familiar with the broad general principles upon which modern treatment of head trauma is based. A cursory review of the pertinent anatomic, physiologic and pathologic data. A classification of head injuries. Symptomatology, diagnosis, treatment—operative, non-operative, important sequelae.

Discussion: Drs. P. J. Gordy and D. J. Preston.

**12:10 P. M.—ANNOUNCEMENTS**

**12:15 P. M.—ADJOURNMENT — EXHIBITS**

**12:30 P. M.—LUNCHEON**

Hunt, Alchemist, Wedgewood, and  
Garden Rooms

Members and Guests.

Guests of the Medical Society of Delaware.

**2:00 P. M.—CERTAIN ASPECTS OF SURGERY  
OF THE NEWBORN**

**C. Everett Koop, M. D., Phila.**

Surgeon-in-Chief, Children's Hos-  
pital.

Of the congenital anomalies incompatible with life but amenable to surgical correction, atresia of the esophagus and imperforate anus deserve special consideration. Early diagnosis and trans-thoracic repair of esophageal atresia should salvage many infants. The proper selection of an operative procedure for imperforate anus should be aimed not only at saving a life but providing normal bowel function.

Discussion: Drs. R. O. Y. Warren and H. H. Stroud.

**2:40 P. M.—WHAT ARE THE THERAPEUTIC  
GOALS FOR NEPHROTIC PATIENTS?**

**Lee E. Farr, M. D., Upton, L. I.,**

Chairman, Medical Dept., Brook-  
haven National Laboratory.

The various recent advances in treatment available for patients with the nephrotic syndrome



do not all provide measures of equal importance in therapy. It is necessary to decide what immediate therapeutic objective is most important and then one by one bring the various aspects of the disease under control. Criteria for therapeutic performance will be discussed.

Discussion: Drs. R. W. Frelick, E. F. Fantazier, and L. B. Flinn.

### 3:30 P. M.—Visit the Exhibits

### 3:50 P. M.—THE TREATMENT OF PERIPHERAL VASCULAR DISEASE

**Hugh Montgomery, M. D., Phila.,**

Chief, Peripheral Vascular Section,  
University Hospital.

Discussion limited to treatment of peripheral vascular diseases, organic and vasospastic, in which ischaemia plays the most important role. Discussion of two principles underlying the treatment of ischaemic diseases of extremities; measures that decrease need for blood flow, and measures that increase the flow of blood to the ischaemic part.

Discussion: Drs. C. L. Munson and R. M. Murray.

### 4:30 P. M.—THE OFFICE MANAGEMENT OF DIABETES MELLITUS

**Perry S. MacNeal, M. D., Phila.,**

Physician, Pennsylvania Hospital  
and Benjamin Franklin Clinic.

A brief and practical discussion of the dietary and insulin therapy of diabetes mellitus as applied to office patients. A discussion of application of the different type of insulin will also be included.

Discussion: Drs. R. L. Dewees and L. B. Flinn.

### 5:10 P. M.—ANNOUNCEMENTS

### 5:15 P. M.—ADJOURNMENT — EXHIBITS

### 2:00 P. M.—5:00 P. M.—CHEST X-RAYS OF MEMBERS AND AUXILIARY

Courtesy of State Board of Health,  
Mobile X-ray Unit.

### 6:45 P. M.—RECEPTION — GEORGIAN ROOM

### 7:30 P. M.—ANNUAL DINNER — DUBARRY ROOM

Members and Auxiliary are invited to subscribe. Tickets from Dr. John W. Barnhart,

1303 N. Franklin St., Wilmington.

DRESS: Optional

Address: PROBLEMS CONFRONTING THE MEDICAL PROFESSION IN THE IMMEDIATE FUTURE

**John W. Cline, M. D., San Francisco**

President, American Medical Asso.

## WEDNESDAY, OCTOBER 10, 1951

Hotel duPont — Gold Ball Room

### GENERAL MEETING

### 9:00 A. M.—CHEMICALS AND HEALTH

**John H. Foulger, M. D., Wilmington**

Director, Haskell Laboratory of  
Industrial Toxicology.

Increasing use of synthetic chemicals in all phases of daily life is causing apprehension about possible new health hazards. Is there serious risk of harm from "smog" in our cities? Is there serious risk of harm in the use of chemicals and chemical products in preparation and protection of our food, or in household tasks? If risk exists, where does it lie and how can it be prevented?

Discussion: Dr. D. H. Aitken and J. W. Howard.

### 9:40 A. M.—INDUSTRY'S CHALLENGE TO MEDICINE

**R. Ralph Bresler, M. D., Phila.**

Associate in Public Health and  
Preventive Medicine (Industrial), Hahnemann Medical College.

The role of the industrial physician has long been misunderstood by the rest of the profession. Industry makes many unusual demands of the industrial physician, demands that the average physician is unable or unwilling to fulfill. The medical profession must realize and accept fully the responsibilities placed upon it by industry.

Discussion: Drs. L. C. McGee and A. J. Fleming.

### 10:20 A. M.—THE GYNECOLOGIC CARE OF POST-MENOPAUSAL PATIENTS

**Franklin L. Payne, M. D., Phila.**

Professor of Obstetrics and Gynecology, University of Pennsylvania.

The post-menopausal era is defined. The difference between this and the earlier eras, as to the character of hazards and symptoms, is pointed out. The physician's gynecological care, consisting of three functions: the relief of unpleasant constitutional symptoms, the treatment of local benign developments, and the early detection of genital malignancy is detailed. Since 60% of the genital malignancies are post-menopausal, this aspect of gynecological care is emphasized.

Discussion: Drs. S. W. Rennie and A. H. Seegar.

### 11:00 A. M.—Visit the Exhibits

### 11:30 A. M.—IMPRESSIONS AFTER 33 YEARS IN MEDICAL PRACTICE

**Charles E. Wagner, M. D., Wilm.**

President, Medical Society of Delaware.



12:10 P. M.—ELECTION OF PRESIDENT-ELECT  
FOR 1952 (New Castle)

12:15 P. M.—ANNOUNCEMENTS

12:20 P. M.—ADJOURNMENT — EXHIBITS

12:30 P. M.—LUNCHEON

Hunt, Alchemist, Wedgewood, and  
Garden Rooms

Members, Guests, and Auxiliary  
Guests of the New Castle County  
Medical Society.

2:00 P. M.—THE ROLE OF THE GENERAL  
PRACTITIONER IN COUNSELLING BEFORE  
AND AFTER MARRIAGE

**O. Spurgeon English, M. D., Phila.**

Professor of Psychiatry, Temple  
University.

A happy, well-functioning marriage is a positive psychotherapeutic agent for all members of the family. The general practitioner can help to establish and to maintain such a marriage. The demand for counselling grows greater and the general practitioner should have a technique for it as he does for other procedures. A good reading list can help in the counselling process.

Discussion: Drs. Verna Stevens-Young and H. T. McGuire.

2:40 P. M.—POTENTIAL DANGERS FROM IN-  
COMPLETE EXAMINATION OF THE PREG-  
NANT WOMAN

**J. Robert Willson, M. D., Phila.**

Head, Department of Obstetrics  
and Gynecology, Temple Universi-  
ty.

Complete systemic and obstetric history and physical examination may aid in detecting asymptomatic abnormalities which if unrecognized may increase either fetal or maternal mortality. Such conditions include cardiac disease, pulmonary tuberculosis, essential hypertension, syphilis, diabetes, nephritis, contracted pelvis, and pelvic neoplasms. If such lesions are detected early in pregnancy and are adequately treated the prognosis usually is favorable.

Discussion: Drs. G. H. H. Garrison and O. N. Stern.

3:20 P. M.—Visit the Exhibits

3:50 P. M.—RETROLENTAL FIBROPLASIA

**P. Robb McDonald, M. D., Phila.**

Attending Surgeon, Wills Hospital.

This syndrome was first described by Terry in 1942. It is the greatest cause of blindness in the preschool child today. The highest incidence of the disease occurs in premature infants, especially those weighing less than 3 pounds at birth. The etiology of the condition is as yet unknown. Re-

cent studies have shown that the disease primarily involves the retina. No specific therapy is known, though some workers feel that ACTH may be of value in the acute stage.

Discussion: Drs. W. O. LaMotte, Jr. and R. O. Y. Warren.

4:30 P. M.—METHODS AND RESULTS IN THE  
SURGICAL MANAGEMENT OF INTRACTABLE  
ACHALASIA

**Herbert R. Hawthorne, M. D., and  
H. Clinton Davis, M. D., Phila.**

Professor of Surgery and Associate  
in Surgery, respectively, Universi-  
ty of Pennsylvania Graduate  
School of Medicine.

The various methods and results of surgical treatment for intractable esophageal achalasia will be discussed, including a personal evaluation of a long series of cases managed either by esophago-gastrostomy or by esophagocardiomyotomy.

Discussion: Drs. H. S. Rafal and W. M. Pierson.

5:10 P. M.—ACKNOWLEDGMENTS

5:15 P. M.—ADJOURNMENT

## IN MEMORIAM

R. RAYMOND TYBOUT, Wilmington  
January 29, 1951

ROBERT W. TOMLINSON, Wilkes-Barre  
March 1, 1951

I. WALLACE MAYERBERG, Wilmington  
May 2, 1951

GERALD L. DOUGHERTY, Wilmington  
August 9, 1951

BARTHOLOMEW M. ALLEN, Wilmington  
September 7, 1951

## WOMEN'S AUXILIARY

to the

MEDICAL SOCIETY OF DELAWARE  
TUESDAY, OCTOBER 9, 1951

*President*, MRS. DOUGLAS M. GAY, Hoekessin.

*President-elect*, MRS. S. W. RENNIE, Wilm.

*Recording Sec'y*, MRS. A. M. GEHRET, Wilm.

*Corresp. Sec'y*, MRS. E. T. O'DONNELL, Wilm.

*Treasurer*, MRS. L. L. FITCHETT, Milford

DELAWARE ACADEMY OF MEDICINE

10:00 A. M.—REGISTRATION

## 10:30 A. M.—BUSINESS MEETING

Mrs. Douglas M. Gay, Presiding.

1. Invocation
2. Introductions, Mrs. Gay.
3. Roll Call of Delegates, Mrs. Gehret.
4. Minutes, Mrs. Gehret.
5. Reports of County Presidents.
6. Reports of Committee Chairmen.
7. Report of Nominating Committee.

12:00 Noon—ADJOURNMENT.

## DU PONT COUNTRY CLUB

## 12:30 P. M.—LUNCHEON

Guest Speakers:

Charles E. Wagner, M. D., Wilmington,  
President, Medical Society of Delaware.Roger Murray, M. D., Wilmington,  
Chairman, Advisory Committee,  
Woman's Auxiliary, M. S. of D.Mr. E. Gillet Ketchum, Philadelphia,  
Supervisor, Re-education Clinic,  
Pennsylvania Hospital.

Adjournment. Afternoon—Free.

## HOTEL DU PONT

2:00-5:00 P. M.—CHEST X-RAYS OF MEMBERS  
AND AUXILIARYCourtesy of State Board of Health,  
Mobile X-ray Unit.

## HOTEL DU PONT

6:45 P. M.—RECEPTION—GEORGIAN ROOM

7:30 P. M.—ANNUAL DINNER—DUBARRY  
ROOMMembers and Auxiliary are invited to sub-  
scribe. Tickets from Dr. John W. Barnhart,  
1303 N. Franklin Street, Wilmington.

DRESS: Optional

Address: PROBLEMS CONFRONTING THE MED-  
ICAL PROFESSION IN THE IMMEDIATE FUTURE.**John W. Cline, M. D., San Francisco**  
President, American Medical Association**WEDNESDAY, OCTOBER 10, 1951**

DELAWARE ACADEMY OF MEDICINE

## 10:30 A. M.—GENERAL SESSION

Mrs. Douglas M. Gay, Presiding

1. Minutes, Mrs. Gehret.
2. Reports of Standing Committees.
3. Unfinished Business.
4. New Business.
5. Installation of Officers, 1951-1952
6. Inaugural Address—  
Mrs. Sylvester W. Rennie.
7. Adjournment.

## 12:30 P. M.—LUNCHEON—HOTEL DU PONT

Hunt, Alchemist, Wedgewood, and  
Garden RoomsMembers, Guests, and Auxiliary  
Guests of the New Castle County Medical  
Society**TECHNICAL EXHIBITS**

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Market and A. Streets  
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Philadelphia 3, Pennsylvania

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Wilmington, Delaware

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Philadelphia, Pa.

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Booth No. 8

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INC.110 E. 16th Street  
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Information

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Detroit 12, Michigan  
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Elkhart, Indiana  
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New York 14, New York  
Pharmaceuticals

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100 Varick Street  
New York, New York  
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**Booth No. 16**

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22 E. 40th Street  
New York 16, New York  
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Wilmington, Delaware  
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New York, New York  
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**Booth No. 20**

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Tuckahoe 7, New York  
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Pharmaceuticals

**Booth No. 22**

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New York, New York  
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**Booth No. 23**

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Chicago 80, Illinois  
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**Booth No. 24**

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Evansville 21, Indiana  
Pharmaceuticals

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832 Market Street  
Wilmington, Delaware  
Hearing Aids

**Booths Nos. 29-30**

GEORGE D. HANBY CO.  
919 Market Street  
Wilmington, Delaware  
Furniture

**Booth No. 31****P. B. RAWLEY**177 Fairview Avenue  
Rutherford, New Jersey**Hearing Aids****Booth No. 32****PHILIP MORRIS & Co., LTD.**100 Park Avenue  
New York 17, New York**Cigarettes****Booth No. 33****DELAWARE ANTI-TUBERCULOSIS SOCIETY**

Buckner Bldg. - 1308 Delaware Ave.

Wilmington, Delaware

**X-rays of Patients****Booth No. 33****DELAWARE STATE BOARD OF HEALTH**

Dover

Delaware

**X-rays of Patients****P-G Study For The G. P.**

Postgraduate study primarily designed for the general practitioner will be the theme of the 1951 Clinical Session of the American Medical Association to be held in Los Angeles, December 4 through 7.

"Therapy will be stressed in a broad presentation of clinical studies on problems the general practitioner meets in daily practice," Dr. George F. Lull of Chicago, secretary and general manager of the A. M. A., stated. "Subjects of interest to the specialist will also be presented."

The scientific program will include presentations on urology; general practice; general surgery; cardiovascular diseases; industrial medicine and surgery; eye, ear, nose and throat diseases; diseases of the chest; neuropsychiatry; medical banks; radiology; anesthesia; pathology; traumatology as related to civil defense; obstetrics and gynecology; dermatology; internal medicine; and pediatrics.

"In addition," Dr. Lull added, "practical clinical discussions, scientific exhibits and

general lectures on basic problems are planned."

Color television to demonstrate surgery, clinical treatment and examination procedure will be one of the highlights of the convention, according to Thomas G. Hull, Ph.D., Chicago, director of the scientific exhibit, who added: "The scientific exhibits will include those on cancer, diabetes, heart disease, obstetrics and gynecology, pediatrics, internal medicine, surgery, dermatology, and others of interest."

Registrants will be afforded the opportunity of spending many pleasant and profitable hours examining the latest in medical books; instruments and apparatus; infant special purpose, and general foods; achievements of pharmaceutical manufacturers, and miscellaneous commodities useful in everyday practice.

"Physicians may solve many troublesome problems by conferring personally with the qualified men and women in attendance at the technical exhibits," said Thomas R. Gardiner of Chicago, director of the technical exhibits.

Both the scientific and technical exhibits will be located in the Shrine Convention Hall, adjacent to the Al Malaikah Temple, where the lectures, clinical presentations, television reception and motion picture showings will take place. Approximately 2,100 lineal feet of space will be used for exhibits, with about 165 firms having technical displays.

In addition to the activities planned for the physicians attending the session, special interesting and diversified activities have been planned for wives accompanying their husbands.

More than 2,000 hotel rooms have been reserved for attending physicians planning to attend the session. Doctors, however, are urged to make their hotel reservations in advance by writing to Chairman, A. M. A. Subcommittee on Hotels, 1151 South Broadway, Los Angeles 15, California.

## + Editorials +

### DELAWARE STATE MEDICAL JOURNAL

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1007 Park Place

M. A. TARUMIANZ, M.D. ————— Assoc. & Managing Editor  
Farrhurst, Del.

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#### DOCTOR'S AND HIGH TAXES

Doctor, why are your Federal taxes mighty high now and going even higher soon? The answer is: for many reasons, one of which is the utter lack of brakes on non-essential Federal spending. As an example we cite the following editorial from the *Baltimore Sun* of September 1, 1951:

#### Which Comes First, Military Aid Or Hobby Books?

General Eisenhower recently informed a group of senators that the "future of civilization" is at stake in the rearmament of Europe through the mutual-aid program. Concerned by congressional delay over the mutual-aid appropriations and the efforts to cut them drastically, he added:

The one thing that can keep the United States and give us nothing in return is to drag this thing out.

General Eisenhower's advice on military matters

is by common consent good advice. Despite that fact, the economy-isolationist bloc in the Senate has now succeeded in pushing through a substantial cut in military-aid appropriations. It has served notice of an intention to go further and try to make another cut in the economic-aid appropriation as well—though it is undeniable that economic aid is inextricably linked with military aid. There can be no such thing as a nation that is militarily strong but economically shaky.

The day after the military-aid program was cut, there appeared on this desk a small Government publication. It is entitled "New Horizons in Your Hobby Through These Useful and Entertaining Government Publications on Hobbies." This circular advertises a large variety of hobby publications, written and published at the taxpayers' expense and to be had from the superintendent of Documents at nominal cost. There are manuals on photography. There is a booklet entitled "Useful And Ornamental Gourds." We find here publications on gardenia culture, the operation of small boats, the raising of orchids, and on the repair of wrist watches, pocket watches, stop watches and clocks. There are how-to-do-it books on building bird houses, making articles out of leather, goose-raising, and the construction of fireplaces.

Why do we drag this into an editorial concerned with appropriations for military and economic aid to our allies?

We drag it in because it illustrates so aptly the tragic error of the isolationist-economy group in the Senate. They are keen for economy—as who isn't? So what do they pick on? They pick on a program which involves the very security of our country, a program which is absolutely essential to our success in the world struggle. They pick on this at a time when Federal spending on purely domestic matters, matters having only the remotest relation to the nation's security, is at the highest point in history. Senator Byrd, whose devotion to economy is famous, is responsible for the assertion that no less than \$5,000,000,000 could be cut from that part of the budget concerned with domestic matters without serious danger or the loss of any really essential Federal services. But has the \$5,000,000,000 been cut? It has not.

We hasten to say that there is nothing scandalous about the publication and advertising of these hobby manuals. They are, as the circular points out, byproducts of other governmental work; and



in normal times, when the taxpayer is under no great pressure, the notion of making them available to hobbyists is a pleasant one. But at a time when, as General Eisenhower has said, the future of civilization is at stake, must hobby books continue to be printed even while we cut down on military aid for our allies? Must the Government keep right on producing new and revised treatises on gardenia culture and furniture repair?

The economy bloc is barking up the wrong tree. The place to stint is not in military aid but in the array of Federal programs which are not essential to our security.

Regardless of your opinions on ECA, the Marshall Plan, the North Atlantic Pact, etc., we doctors surely agree en masse that the frivolities must stop—and soon. How about telling your feeling on this most important matter to your representatives in the Congress? Regardless of political affiliations, they are all interested in sound government financing.

#### PROGRAM FOR 1951 SESSION

This issue contains the official program for the 162nd Annual Session of the Medical Society of Delaware. The program is more complete at this early date than it has been for several years. The list of exhibitors with descriptions of their exhibits is also complete, and represents the largest exhibit we have ever held.

Notice of the Annual Session has been printed on the front cover of *THE JOURNAL* in the July, August, and September issues, so no one can plead ignorance of the exact dates. We hope for a full and actively participating attendance. Let's go!

#### STATE BOARD OF HEALTH NUMBER

Once more, for the twenty-second year, this issue of *THE JOURNAL* presents the activities of the Delaware State Board of Health. This feature is one not emulated by many of the other state medical journals, but we find it profitable to publish it because we believe it benefits the department, the profession, and the public. This year it contains more articles than heretofore, several of them of unusual interest and value.

*THE JOURNAL* is happy to extend to Dr. Floyd I. Hudson, the Executive Secretary of the Board, and to all of his collaborators, its thanks for the excellent material which they have contributed.

#### To Magnify Faint Murmurs

A new method to facilitate the detection of heart murmurs, employing the vasoconstrictor neo-synephrine, Winthrop-Stearns, is reported by Dr. E. M. M. Besterman, a specialist in rheumatic fever, in a recent issue (August, 4725:205) of the *British Medical Journal*.

The method promises speedier diagnosis of damage to heart valves resulting from rheumatic fever. According to Dr. Besterman, injection of neo-synephrine simultaneously slows the heart rate and increases the flow of blood and stroke volume, thus accentuating the murmur.

Early recognition of heart valve damage is extremely important. Murmurs are often the only evidence of such damage; but in the early stage of damage, they are inaudible or faint and apt to go undetected.

Dr. Besterman used the new method on 64 patients, 35 of whom were known to have rheumatic carditis and 19 of whom had rheumatic fever with no known symptoms of heart damage. Almost all of the patients were children.

Murmurs were successfully magnified in a vast majority of cases of heart damage, and 9 patients in whom no murmurs had been detected previously were found to have murmurs. In every one of the 29 patients without heart damage, the heart sounds were intensified but no murmurs were detected. In all cases any difficulty in distinguishing between normal heart sounds and murmurs was resolved.

In a group of 15 patients, murmurs had been heard but had disappeared two weeks before the tests with neo-synephrine. Murmurs reappeared in most cases in the tests. Dr. Besterman pointed out that it is important to give the neo-synephrine injections within four to five weeks in such cases of disappearing murmurs, in order to bring them out again for accurate diagnosis of damage to heart valves.

Neo-synephrine produced rapid results. Murmurs made audible by use of the preparation usually appeared within three minutes after injection and persisted for 15 to 25 minutes. Thirty patients received two or more injections, the others just one.

### Cardiovascular Seminar

A seminar on cardiovascular disease will be held at the V. A. Hospital, Wilmington, on the first Monday of each month at 2:00 p.m. in Room 1044 (just inside the ambulance entrance). All physicians are cordially invited. A tentative program will be posted in local hospitals prior to each session.

W. William A. Jeffers, of the University of Pennsylvania, and Consultant in Cardiovascular Disease to the V. A. Hospital, will be a regular member of the panel. The guest for September will be Dr. Martin H. Wendkos, also of the University of Pennsylvania. Dr. A. Henry Claggett, Chief of Medicine and Cardiologist of the V. A. Hospital, will act as moderator.

All interested physicians are not only invited to attend but will be urged to enter actively into the discussion.

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#### BARTHOLOMEW M. ALLEN, M. D.

Dr. B. M. Allen of 11 Manor Avenue, Claymont, chief of the department of radiology of the Memorial Hospital and president of the Delaware Academy of Medicine, died on September 7, 1951 at his home following a heart attack.

Dr. Allen, a former president of the staff of the Memorial Hospital and director of its radiology department for 24 years, had been ill of a heart condition since December of last year, but his sudden death was unexpected. He was 63 years of age.

Dr. Allen maintained his medical offices at 909 Washington Street. He was a past president of the New Castle County Medical Society, past president of the Philadelphia Roentgen Ray Society and at the time of his death was consultant radiologist for the DuPont Company.

Dr. Allen was born in Seaford on March 29, 1888, a son of Wilbert and Anne Adams Allen.

He attended the Seaford High School and the University of Pennsylvania and was graduated from the Medical School of the University of Pennsylvania with a medical degree in 1915.

Following his graduation Dr. Allen served

for two years in the Army Medical Corps in World War I, one of them in France.

On his return from the Army service he started general practice at New Castle in 1919, and remained there for three years and then moved his office to Wilmington.

After he moved to Wilmington he studied radiology under the late Dr. David Bowen, radiological authority, at the Graduate Hospital of the University of Pennsylvania at nights.

Beginning in 1925 Dr. Allen devoted full time to radiology. He joined the staff of the Memorial Hospital two years later.

In addition to the societies in which he held office Dr. Allen was a member of the American Medical Association, a fellow of the American College of Physicians, fellow of the American College of Radiology, a councilman for the Radiological Society of North America, and a member of the Kiwanis Club, Oriental Lodge, No. 21, A. F. & A. M., Delaware Post, No. 1, American Legion, and the Episcopal Church.

In addition to his wife, Mrs. Anna Weaver Allen, Mr. Allen is survived by two sons, Olin S. Allen II, Wilmington and George B. Allen, Manchester, Conn.; a daughter, Mrs. Jane Allen Weaver, Wilmington; a granddaughter, Betsy M. Allen, Manchester, and two brothers, Dr. Olin S. Allen, Swarthmore, Pa., and Howard W. Allen, Seaford.

Services were held at the P. E. Cathedral Church of St. John, September 10, 1951, Dean J. Brooke Mosley officiating, assisted by Rev. Charles A. Rantz, of Claymont. The body now lies in a crypt at the Wilmington-Brandywine Cemetery.

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### BOOK REVIEWS

American Illustrated Medical Dictionary by W. A. Newman Dorland, M.D., Lieut.-Colonel, M.R.C., U. S. Army; Former Member of the Committee on Nomenclature and Classification of Diseases of the American Medical Association. 22nd Edition. Pp. 1736, with 720 illustrations, including 48 plates. Fabricoid. Price \$10.00. Philadelphia: W. B. Saunders Company, 1951.

The new 22nd edition of Dorland is perhaps the most complete in the English language, more than 2,000 new words having been added to this edition, until it now contains 132,000 definitions. New features include an

article on Fundamentals of Medical Etymology and a Table of Modern Drugs and Dosages. The type is clearer than in previous editions, and the paper slightly better. We have not yet gotten use to having the thumb indices coupled, but give us time. In our usage up to now we have noted only three words that we wanted defined that were missing. We still like Dorland better than any of the dictionaries that we use.

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Progress Volume. By Harold Thomas Hyman, M.D. Pp. 734. Cloth. Price, \$10.00. Philadelphia: W. B. Saunders Company, 1950.

Hyman's New Program Volume constitutes Volume 5 of his excellent Integrated Practice of Medicine, which we reviewed in 1947. This book contains an appraisal of the latest in developments in therapeutics, and fusion with the original set has been accomplished by continued adherence to the concepts of the original volumes by numerous page references interplated in the text and by inclusion of indices to illustrations, differential diagnosis, and symptoms, and the general subject index to Volumes 1 to 4. This book concludes with a separate index to the Program Volume on green tinted paper. Cumulatively, these indices provide complete access to text, charts, and illustrations of all five volumes.

This volume is indispensable to the owners of the original four volumes.

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Santa Claus, M. D. By W. W. Bauer, M.D., Director of the Bureau of Health Education, American Medical Association. Pp. 266. Cloth. Price \$2.75. Indianapolis and New York: Bobbs-Merrill Company, 1950.

Bauer writes for the laymen a book that debunks the socialists' propaganda, their ideas, and their statistics. He reiterates that the American Way is the best way and has led to the highest health standards in the world. As an instance of this, he states that "Swedes live longer in Minnesota than they do in Sweden." He discusses the 12-point program of the A.M.A. and at one place or another gives all of the answers to all of the questions that can be raised by proponents of compulsory health insurance.

The book makes excellent reading for physicians and for laymen, especially for those in both groups who lean towards statism in medicine.

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The Other Side of the Bottle. By Dwight Anderson, former Director of Public Relations and Executive Secretary of the Medical Society of the State of New York. Pp. 258. Cloth. Price, \$3.00. New York: A. A. Wyn, Inc., 1950.

Anderson's book is the fruit of many years of study of the problems of alcoholics, in which he analyzes both the physical and psychological treatments that offer new hope against the background of his own struggle with a seemingly incurable form of the disease. Anderson's experiences are revived in a most interesting manner in this volume. He is a member of the board of directors of the National Committee on Alcoholism, and has been a frequent contributor to the Quarterly Journal of Studies on Alcoholism, published by Yale University. This book should prove of unusual interest and value to every person facing the problem of alcoholism.

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Surgical Forum—Proceedings of the Forum Sessions; 36th Clinical Congress of the American College of Surgeons, Boston, October, 1950. Surgical Forum Committee, Owen H. Wangenstein, M.D., Minneapolis, Chairman. Pp. 665, figs. 260, 6 tables. Cloth. Price, \$10.00. Philadelphia: W. B. Saunders Company, 1951.

This volume is the first of a proposed series by the American College of Surgeons and its essence is summarized by Dr. O. H. Wangenstein in his introduction: "The Surgical Forum was born out of the great need for young men, engaged in research on surgical problems, to have an opportunity to bring their work before an audience of surgeons."

The contents is a compilation of the papers presented before the October, 1950 meeting in Boston. The volume covers an unusually wide field of subjects and should be of major assistance to those surgeons who have allowed themselves to become a bit rusty in some of the many up-to-date doings in the surgical field. It is not meant for the seasoned specialist, but should be in every worth while surgical library.

---

Eyes And Industry. (Formerly Industrial Ophthalmology). By Hedwig S. Kuhn, M.D., Industrial Ophthalmologist, Hammond, Indiana. 2nd edition. Pp. 378, with 151 illustrations. Cloth. Price, \$8.50. St. Louis: C. V. Mosby Company, 1950.

Dr. Kuhn for many years has led research in the field of industrial ophthalmology. She has adopted the principle that to produce one must see effectively, and to avoid waste

one must see effectively, and that to do this one must guard the eyes by physical protective devices whenever and wherever indicated. Finding the answers to this principle involved considerable research on actual patients. This book reports the conclusions she has reached from such research, and is the only book in which many important items on this subject can be found. An excellent bibliography concludes each chapter.

This book should be of more than usual importance to physicians and oculists who are in contact at all with cases arising from industrial plants.

---

Researches in Binocular Vision. By Kenneth N. Ogle, Ph.D., Section on Biophysics and Biophysical Research; Research Consultant in the Section on Ophthalmology, Mayo Foundation and Mayo Clinic, Rochester, Minnesota. Pp. 345, with 182 figures and 26 tables. Cloth. Price, \$7.50. Philadelphia: W. B. Saunders Company, 1950.

Ogle's book summarizes the advances in physiologic optics and the application of that research to clinical ophthalmology and to visual science in general for the last twenty-five years, including the 18 years of researches conducted at the famous Dartmouth Eye Institute at Hanover, New Hampshire. The book does not attempt to be a comprehensive text in binocular vision, but rather it originates and integrates particular researches that have been published in a number of different and somewhat unrelated journals. As the authoritative source of basic truths so far discovered in this field, every ophthalmologist will want this book. Every general practitioner who attempts to test eyes in his office should either have it or have it available in his local medical library.

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Thoracic Surgery. By Richard H. Sweet, M.D., Associate Clinical Professor of Surgery, Harvard University. Illustrations by Jorge Rodriguez Arroyo, M. D., Assistant in Surgical Therapeutics, University of Mexico. Pp. 345, with 155 illustrations. Cloth. Price, \$10.00. Philadelphia and London: W. B. Saunders Company, 1950.

Sweet's book is the latest in a new and rapidly expanding field of special surgery,

and one in which not many worthwhile texts are available. The work does not aim to be encyclopedic, and there are gaps here and there that will require filling from other sources. The book contains the usual chapters on anatomy and general technical considerations, and then describes the current operations about which there is general agreement: controversial issues are not included.

While even the experienced thoracic surgeon will consult this volume with profit, its main appeal will be to the general surgeon who wishes to keep abreast of the current thinking and procedures in thoracic surgery. It is also a very valuable reference book for the hospital library, where the interns and residents will learn much from it.

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Techniques in British Surgery. Edited by Rodney Maingot, FRCS. Pp. 734, with 473 illustrations. Cloth. Price, \$15.00. Philadelphia: W. B. Saunders Company, 1950.

Maingot's book comprises a number of specially selected articles on surgical subjects written by twenty-nine leading surgeons, and supplies a good cross section of British surgery as practiced today. Part I deals with surgery of the head, neck, and spinal column; Part II with surgery of the thorax, including such comparatively new subjects as the tetralogy of Fallot and other defects of the heart; Part III covers the surgery of the abdomen and pelvis; while Part IV covers various phases of orthopedic and neurological surgery. While some of the philosophy and procedures included are controversial, we have a feeling that the end-results of our British cousins compare quite favorably with our own.

This book will make a definite appeal to every American surgeon who wants to know what his British confreres of today are doing: The Britishers have always been eminently practical practitioners.

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The Management of Fractures, Dislocations and Sprains. By John Albert Key, M.D., Clinical Professor of Orthopedic Surgery, Washington University; and H. Earl Conwell, Associate Professor of Orthopedic Surgery, University of Alabama. Fifth Edition. Pp. 1232. Cloth. St. Louis: C. V. Mosby Company, 1951.

It has been five years since the previous edition of this standard text book. In the new edition an effort was made to make the book less bulky, but the addition of new material and revision of old material have kept the book at only 90 pages less than its former size. Some chapters have been omitted and others are rewritten; in fact the changes have been so extensive that the entire book has had to be reset. The general pattern and arrangements of previous editions is continued. The text, as it always has been, is brief and authoritative. The illustrations are most helpful, and the index is quite complete. This is one of the really great books in this field.

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CIBA Collection of Medical Illustrations. By Frank H. Netter, M.D. Pp. 222. Cloth. Price \$6.50. Summit, New Jersey: Ciba Pharmaceutical Products, Inc., 1948.

This handsome volume is a compilation of pathological and anatomical paintings prepared by one of America's greatest medical illustrators. The volume contains 191 full color prints, illustrating thirteen different areas, including the lungs, chest, esophagus, duodenum, small intestine, large intestine, testicle, prostate, male breast, female breast, heart and aorta. Each plate has sufficient descriptive text, and the whole material is readily available through an index. The work is highly commendable to all practitioners.

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Hair Free; The Story of Electrolysis. By Samuel Simon. Pp. 100. Cloth. Price, \$ . . . Miami Beach: Samuel Simon, 1370 Washington Avenue, 1948.

This little brochure relates to the type and causes of superfluous hair and describes eleven temporary or permanent measures taken to eliminate it. The text is quite readable and dependable. The book concludes with a summary of the requirements in the various states for practitioners of this branch. The book will be of interest chiefly to cosmeticians.

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Principles and Practice of Obstetrics. by J. P. Greenhill, M.D., Attending Obstetrician and Gynecologist, The Michael Reese Hospital; Obstetrician and Gynecologist, Associate Staff, The Chicago Lying-In Hospital; Attending

Gynecologist, Cook County Hospital; Professor of Gynecology, Cook County Graduate School of Medicine. 10th edition, Pp. 1020, with 1140 illustrations on 864 figures, 194 in color. Cloth. Price, \$12.50. Philadelphia: W. B. Saunders Company, 1951.

This is the tenth edition of a textbook on obstetrics, originally by Joseph B. Delee, M.D., which has been more or less of an institution. It is quite comprehensive and has been divided into the usual sections and chapters found in modern treatise on the subject. As the junior author states, some of the old has been deleted and newer ideas have been added.

In some previous editions of the text, considerable stress was placed on preparations for, and conduct of, home deliveries. In accordance with the trend of the times this has been reduced to its proper proportion.

The discussion of Roentgenography in Obstetrics, while not elaborate, does lay a groundwork for further study and, rightfully so, decries the increasing dependence on x-ray films rather than on careful examination and clinical pelvimetry.

Several years ago this reviewer had the privilege of hearing the junior author present his rather negative sentiments on the use of spinal anesthesia in obstetrics. I was not impressed by his statements and the present increase in usage of this form of anesthesia would seem to contradict. However, in all honesty, this may be a swing of the pendulum and the passage of time will bring forth the proper answer.

In the Treatment of Threatened Abortion the author does not seem to be impressed by the various papers on the use of progestosterone and stilbestrol. In discussing this matter with other practitioners of the specialty, I am inclined to agree with him.

The author also might be called to task for his acceptance of the dictum 'Once a section, always a section'. It is a difficult problem to solve.

All in all, the text is a major contribution to the literature on the subject. The various controversial viewpoints will be accepted or rejected depending on the background of the reader and the teaching with which he has come in contact.





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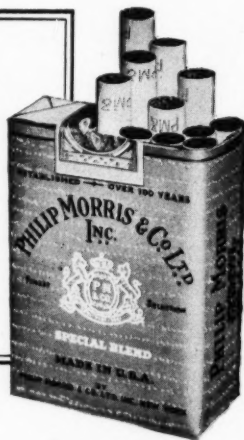
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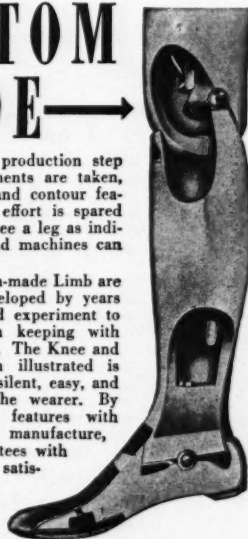
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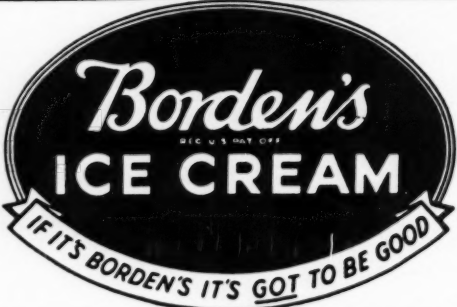


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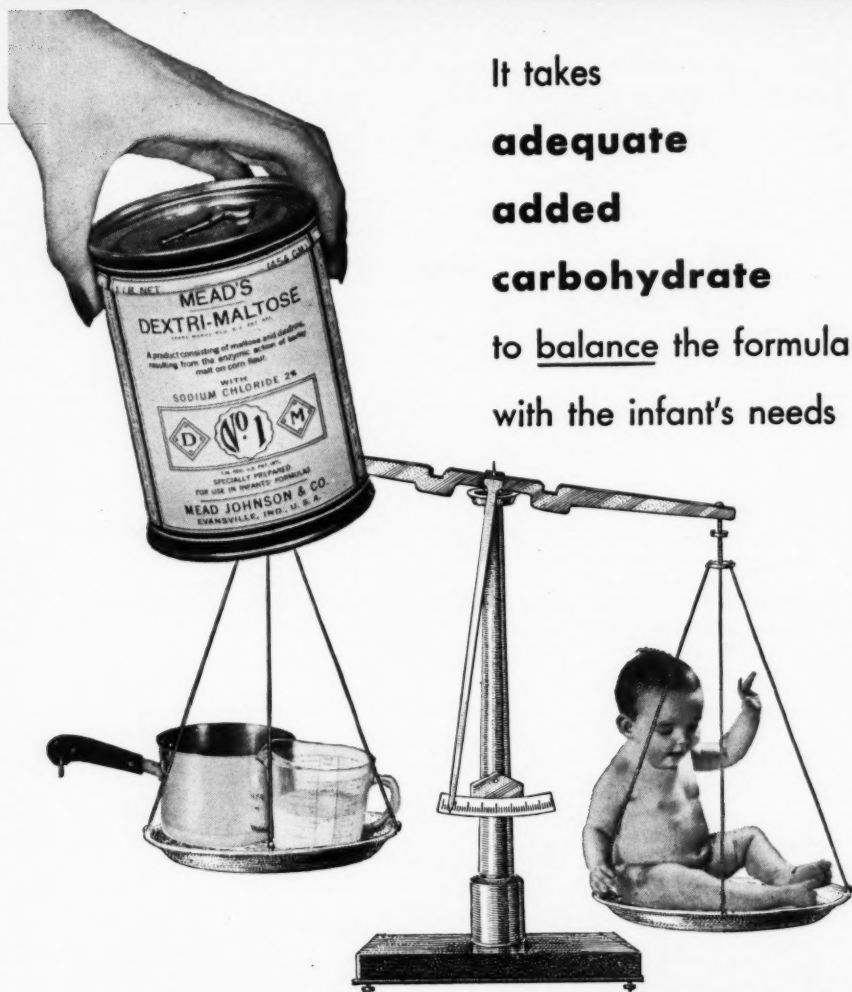
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